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ABSTRACT

This report provides a review of current research and innovative programs and practices as viewed from an international perspective. To develop these volumes, the International Council on Education for Teaching (ICET) invited educators from Africa Asia and the Pacific, Europe, the Middle East, South America, Central America, and the Caribbean to address teacher education and school reform. The theme was supported by plenary sessions and research-based paper presentations focusing on four topics: (1) enhancing values in school reform to promote democratic values and practice and develop a democratic pedagogy of school renewal; (2) fostering partnerships in school reform between schools and universities, with professional development schools, between professional and public schools, and between centers of educational development and public schools; (3) preparing teachers for school reform through innovations in preservice teacher education and their likely impact on schools; and (4) capitalizing on international collaboration for school reform by identifying national, regional, and international efforts for achieving school reform. These volumes outline key issues confronting educators and suggest successful strategies and practices for educators to model in pursuit of quality teacher education and school reform on the local, national, and international level. (SM)

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The Hashemite Kingdom of Jordan

THE NATIONAL COMMITTEE
FOR THE 43rd WORLD ASSEMBLY

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TEACHER EDUCATION
AND
SCHOOL REFORM

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TEACHER EDUCATION
1996 Proceedings
Vol. (1)

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TEACHER EDUCATION
AND
SCHOOL REFORM

International Yearbook on
Teacher Education
1996

Proceedings Vol. 1

Opening Ceremony Presentations,
Keynote Frank H. Klassen Lecture,
Plenary Session Address and Concurrent Session Papers

From the

Forty-Third World Assembly of
The International Council on Education for Teaching

(Including the final World Assembly report and recommendations
Submitted by ICET to UNESCO)

3

INTERNATIONAL COUNCIL ON EDUCATION FOR TEACHING

The International Council on Education for Teaching (ICET) is an international association of educational organizations, institutions, and individuals dedicated to the improvement of teacher education and all forms of education and training related to national development.

ICET incorporated in the United States as a non-government organization (NGO), and has official operational relations with UNESCO. Membership in ICET is open to individuals, colleges, universes, government agencies, and private sector organizations that are engaged in educational and training activities.

ICET is governed by Board of Directors and is provided with professional counsel by a Board of Trustees. Directors and Trustees are representative of the geographical, social, cultural, and professional diversity of the world. ICET activities are administered by an executive office located in washington, D.C. Metropolitan Arra, USA, which facilitates the cooperative projects of its members.

ICET conducts an annual World Assembly as a forum for the worldwide educational community on matters related to national development and teacher education, and publishes a volume of proceedings, the International Yearbook Teacher Education.

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TABLE OF CONTENTS

Acknowledgements: Sandra J. Klassen xvii

Preface: Nelly Aleotti Maia xix

Introduction: Victor Billeh and Kamal Dawani xxi

Messages from:
H.H. Crown Prince El Hassan bin Talal xxiii
President Nelly Aleotti Maia
Executive Director Sandra J. Klassen xxv

PART I: OPENING CEREMONY PRESENTATIONS

Opening Remarks by Dr. Abdullah Nsour
Ministry of Higher Education, (Hashemite Kingdom of Jordan) 3

Opening Remarks by Dr. Nelly Aleotti Maia
ICET President (Brazil) 7

1996 ICET Distinguished Fellows Award Recipients:
H.H. Crown Prince El Hassan bin Talal 9
H.E Ali M. Fakhro (Bahrain) 11

Presented by: **Sandra J. Klassen**
ICET Executive Director (USA)

PART II: KEYNOTE FRANK H. KLASSEN LECTURE

His Royal Highness, Crown Prince El Hassan bin Talal 15

PART III: PLENARY SESSION ADDRESSES

Plenary Address, Topic one, *Enhancing Values in School Reform*
Dr. Elaine Jarchow (USA) 27

Plenary Address, Topic two, *Fostering Partnerships in School Reform*
B.J. McGettrick (Scotland)
Robert S. Patterson and Russel T.Osguthorpe (USA) 43

Plenary Address, Topic *three, Preparing Teachers for School Reform*
Dr. Sim Wong-Kooi (Brunei Darussalm) 63

Plenary Address, Topic four, *Capitalizing on International Collaboration for School Reform*
Stephen P. Heyneman (USA) 87

Plenary Address, Report and Discussion of the International Bureau of Education 1996 Conference on Education:

1. The International Bureau of Education (IBU) 1996 Conference on Education: Strengthening the Role of Teachers in a Changing World;
2. The International Commission of Education for the Twenty-First Century, Learning the Treasure Within.
Juan Carlos Tedesco (Switzerland) 119

PART IV: CONCURRENT SESSION PAPERS

TOPIC ONE: Enhancing Values in School Reform

Elementary School Principal's Time Management: A Field Study
Moustafa Abd El-Baki (Jordan) 133

Enhancing Instructional Quality through Educational Reform: Value-Added After Four Years
Kapur Ahlwat (Jordan)
Hisham Al-Da'jeh (Jordan) 143

Recent Status of Teacher of Special Education in Jordan: "A Descriptive Study"
Ahmad N. Al-Ghrair (Jordan) 165

Democratic Practices in the Jordanian Schools
Mohammed Al-Hajeid (Jordan) 169

Promoting Teaching and Learning Efficiency
Qassem Al-Qudah (Jordan) 189

Effectiveness of a Critical Course on the Improvement of Prospective Teachers Thinking Skills
Mahmoud Al-Wher (Jordan)
Hind Al-Hammouri (Jordan) 201

Educating Racial Minority Groups for Full Participation in the Social Systems of the Dominant Society: Negotiating Cultural Realities in the Context of Education Reform
Veronika Bohac-Clarke (Canada)
Elizabeth Churchill (Canada) 211

Multiple Intelligences: Importance for Teacher Education
Carolyn H. Brown (USA) 227

Teachers as Listeners
Jean Marie Choate (USA) 239

Multicultural Education: An Innovative Approach to Teacher Education
Anne Richardson Gayles-Felton (USA) 245

Conflict Management: An Essential Tool in Building a Healthy School Climate
Linda Goodyear-Stevenson (USA)
Helen James Wallace (USA) 269

Personality and Teaching Performance of Student Teachers: Implications for Teaching Effectiveness
Zakaria Kasa (Malaysia)
Zaidatol Akmaliah Lope Pihie (Malaysia)
Rahil Mahyuddin (Malaysia)
Abd. Majid Mohd. Isa (Malaysia)
Habibah Elias (Malaysia)
Wan Zah Wan Ali (Malaysia) 279

Knowledge Restructuring and Teacher Change in the Context of a Transdisiplinary Curriculum
Tamar Levine (Israel)
Yael Nevo (Israel) 287

Valuing Theories of Action through Case Research Methods and the Experiential Learning Process
Violet Maroe Malone (USA) 309

Social Studies Programme in Teacher Education to Enhance Democratic Values and Practices
Rosalind Y Mau (Singapore)
Jessie Wong (Singapore) 315

Different Drummers, Different Beats: Cultural Context vs. Musical Content in the Education of an Artistic Population
Steven J. Morrison (Hong Kong) 325

Holistic Intervention in the Bedouin Town Tel-Sheva Intended to Improve Educational Achievements
Miri Munk (Israel)
Shlomo Black (Israel) 337

Henry Gurney Reform School-Residents' Perception of Criminal Acts and Previous Schooling: Considerations for School Reform
Sharifah Md. Nor (Malaysia) 349

Homework Etc: A Character Development Eduation Partnership Program
Uchenna T. Nwachuku (USA) 363

Competency Based Teacher Training Programme
Purushomdas G. Patel (India) 371

School-Focused In-Service Training: A key to Restructuring Israeli Schools?
Naama Sabar (Israel)
Ayelet HaSharar-Francis (Israel) 379

Focus on the Teacher: The Transfer of Knowledge from Teacher Education into the Primary School Classroom in Brunei Darussalam
Hajah Zaitun bte Hajah Taha (Brunei) 395

Teachers' and Administrators' Perceptions of Banks' Typology and Curriculum Goals in Relationship to Students and Instructional Materials: Survey Findings and Implications for Pre-K-Postsecondary
Louise M. Tomlinson (USA) 403

School Rules: Some Tensions Between Student Teachers' Needs and School Policy and Practice
Jim Welsh (Brunei) 419

Enhancing Student Learning Outcomes: What's A School Principal to do?
Patricia J. Wentz (USA) 435

A Pictorial Review of Instructional Technology Systems
Charles H. Wentz (USA) 441

Teacher College Students' Postgraduate Negative Changes of Ostensibly Learned Educational Objectives in Science Education: Erosion or Simply a Shedding of Unwanted Values
Mahmoud Zahalka (Israel) 445

(TOPICS TWO, THREE, FOUR ARE AVAILABLE IN VOLUME TWO)

INDEX OF AUTHORS 453

TOPIC TWO: Fostering Partnerships in School Reform
(See Vol. II)

The Effect of Educational Sciences: Faculty Program on the Effectiveness of In-Service Teachers
Mohammad Abu Abu Alia (Jordan)
Mustafa Sabri (Jordan)

Utilization of Instructional Technology Services by Faculty Members at Sultan Qaboos University
Majed Abu-Jaber (Jordan)
Mohamad Eltahir Osman (Oman)

School-Based Master's Programs: Reform from within the system
Mary S. Bowser (USA)
RichardG. Creasey (USA)
Karen T. Huff (USA)
Catherine Tisinger (USA)

The Role of Higher Education in Fostering Lifelong Learning Partnerships with Teachers
Christopher Day (United Kingdom)

The Partnership between Chapman University-Coachella Campus and the Coachella Valley Unified School District: A lesson in School Reform, Resource Allocation and Ethics
Judy Doktor (USA)

Partnership Between Primary, Secondary and University Teacher and Literate and Non-Literate Partents in Curriculum Development
Aliu Babatunde Fafunwa (Nigeria)

A Faculty Development Program For Piloting A New Mathematics, Science and Technology Curriculum
Ewaugh Finney Fields (USA)
Richard E. Woodring (USA)

Teachers and Students-Strategies of Action and Influence in Educational Institutions in Rio de Janeiro
Edson A. de Souza Filho (Brazil)

The Cooperative School Project at Kaye College, Beer-Sheva: A Story of Partnership and Professional Growth
Ariela Gidron (Israel)

Children's Literature-Fantasy that Builds Reality
Maria Lucia Fernandes Guelfi (Brazil)

Teacher Perception on Status of Vocational Agricultural Education in Malaysia
Ramlah Hamzah (Malaysia)

The Process of Changing the Administrative Culture
Nora Nelson Hutto (USA)

Partnership between Universities and Schools as an Introduction to School Reform
Fawaz Jaradat (Jordan)
Suad Ayoub (Jordan)

Partnership for Education Staff Development: Joint Training Program at the American University in Cairo
Yvonne Kerek (Egypt)

Fostering Partnership between the Hong Kong Institute of Education and Primary Schools in Hong Kong: A Study of the Cooperating Teacher Scheme in the Practicum of the New Course
Law Sin Yee Angelina (Hong Kong)
Fu Yin Wah Priscilla (Hong Kong)
Tung Hok Ping (Hong Kong)
Sze Sin Heng Celine (Hong Kong)

Professional Traits Needed for Career Success: How it elates to the Education of Future Workers
Zaidatol Akmaliah Lope Pihie (Malaysia)
Zakana Kasa (Malaysia)

A New Approach Towards Effective School-Based Teacher Development
Maha Qur'an (West Bank)
Tafeeda Jarbawi (West Bank)

Managing Change A School Technology initiative
Jean Russell-Gebebett (United Kingdom)

Practice Teaching in Teacher Education
Egidio F. Schmitz (Brazil)

Insights Derived From Pre-Service Student Teachers' Evaluation of an Early Field Experience and a Supported Teaching Practice Programme
Sylvia Tang Yee Fang (Hong Kong)

TOPIC THREE: Preparing Teachers for School Reform

(See Vol. II)

The Impact of Global Education on Developing Teacher Trends towards World Civilization
Mustafa Abu Ashaikh (Jordan)
Sawsan Tamimi (Jordan)

Graphing Calculators: Teacher Perception, Training, and Attitude
Khaled Abuloum (Jordan)

The Effectiveness of Acquisition of Teaching Competencies in the Program of Practical Education Among the Teacher Students in the University of Jordan
Khaled Abuloum (Jordan)
Mahmoud Al Ghazawi (Jordan)

Teacher's Views of Assessment Practices
Leah D. Adams (USA)

The Role of Teacher Certification Programmes in School Performance
Samar Aghbar (Jordan)
Monther Shboul (Jordan)

The Impact of Pre-Service Teacher Education Program at the University of Jordan on Perdagogical Thinking of its Students
Omar Kareem Al-Haddad (Jordan)
Amin Al-Kukhunn (Jordan)
Hamzah Al-Omari (Jordan)
Naseer Al-Khawalden (Jordan)
Rateb Ashour (Jordan)
Ghazi Oudeh (Jordan)

New Roles of Jordan Teachers in School Reform
Ahmad Al-Kateeb (Jordan)
Mousa Alnabhan (Jordan)

Assessment of the Program for Preparing Islamic Education Teachers in Jordanian Public Universities
Naseer Al-Khawaldeh (Jordan)

Is Nigerian Teachers Ready for School Reform? An Empirical Investigation
Tony Aladejana (Nigeria)

Fafunwa's Contributions to Teacher Education Reforms in Nigeria
Tony Aladejana (Nigeria)
Kayode Alao (Nigeria)

A Study of Induction Year Program For Beginning Teachers in Jordan
Moh'd Lamal Yousef Alyah (Jordan)

The Role of Teacher in the Community School
Mohammad Ashour (Jordan)
Radah Al-Khateeb (Jordan)

Teachers' Professional Development: A Re-Examination in an Era of Reform
Salem Aweiss (Palestine)

Literacy in Conflict: Ethnicity or Nationalism?
Charles T. Barber (USA)

Teaccher Education and School Refrom: Acase Study from Jordan
Victor Billeh (Jordan)
Munther Masri

The Use of Reflective Practice and Personal Narratives in the Professional Development of Teachers
Darrell A. Bloom (USA)

Drama Education in School: A Must for the Teachers Education
Litwin Cheng Chun Chor (Hong Kong)

How Can Teachers Activate Students' Cognitive Strategies by Using Adjunct Questions? A Prescriptive Instructional Model for Improving Teaching and Learning
Afnan N. Darwazeh (Palestine)

A Specification for an Information Systemic Data-Structure to Define and Quantify Ethic in Course Design: A Computer-Integrated Quality-Based Approach to Enhance Teacher Education and School Reform
Saljalendu Dey (USA)

The Practical Education Programme at the University of Jordan: A Look from within
Turki Ahmad Ali Diab (Jordan)

Preparing Teachers for School Reform: Case Study of One Teacher Education Program
John R. Freese (USA)

Drama and the Infusion of Multiethnic Content: An Exploratory Study
Lorenzo Garcia (USA)

UNESCO'S Teacher Education Resource Pack: A Means for School Reform Through School-Based Staff Development
Hala T. Ibrahim (Jordan)
Zuhair Zakaria (Jordan)

The Thirty Settlement Project
Anat Kainan
(Israel)

Preparing Teachers for School Reform
Ivete Manetzeder Keil (Brazil)

Programmes and Practices Related To: Innovations in Pre-Service and In-Service Teacher Education and Their Likely Impact on Schools; the Role of Commitment; Empowerment and Reflection; the Role Assessment and Student Support
Daniel Kiggundu-Mukasa (Uganda)

Reinforcing New Visions for the College of Education in Jordan to Foster School Reform
Fakhri R. Khader (Jordan)

What Special About Providing Inservice Courses for Teacher Training: When Technical and Commercial Personnel Become Teachers
John Lam Tak Shing (Hong Kong)
Cheuk Fai Leung (Hong Kong)
Joe Wai Shing Li (Hong Kong)
Flora Wai Ming Yu (Hong Kong)

Student Teachers' Views of Concept Mapping as a Means to Enhance Collaborative Learning in Science Classrooms
Atputhasam Lourdusamy (Brunei)

Culture Bias and Insensitivity: What Role does it play in Cross-Cultural Teaching?
Phipip E. Lyon (Hong Kong)

Dealing with International Demand for Teachers: The Effectiveness of Varying Preparation Programs
John W. Miller (USA)
Michael C. Mckenna (USA)

Preparing Teachers to Restructure Schools in Botswana
Albert Reitseng Mothibi (Botswana)

The Effect of Trading Programs for Laboratories Personnel on Their Performance
Ahmad J. Obaid (Jordan)

Classifying Teachers in Ranks as a base to Professionalize Teaching
Zougan Obiedat (Jordan)
Mme. Southaila Abu El-Sameed (Jordan)

Reform of Matriculation Exams in Israel-Interaction between the Teaching/Learning Process and Assessment
Shmaryahu Rozner (Israel)
Michael Moore (Israel)

Applying the Pedagogical Cybernetic (Support for the Training of Instructional Personnel)
Yolanda Sandoval Sanchez (Mexico)

Training Teachers for Bilingual Children
Helga Schwenk (Turkey)

Preparing Teachers for School Reform: UNRWA Experience
Moh'd Shahin (Jordan)

Alternative Assessment and Successful School Reform: Power, Participation, and Equity
C. Joye Smith (USA)

Improving Primary School Teachers Quality Through Distance Learning System: (Indonesian Experience)
Mohamad Surya (Indonesia)

Teacher Education and the Liberal Arts: A Case Study of the Department of Education at the University of Richmond
Elaine Traynelis-Yurek (USA)
Christopher F. Roelike (USA)
Patricia Stohr-Hunt (USA)

TOPIC FOUR: Capitalizing on International Collaboration for School Reform *(See Vol. II)*

Consortium: An Effective Instrument for Fostering Partnership in School Reform
Crispiniano R. Acosta, Sr. (Philippines)

Burnout and Coping Among Palestinian Teachers
Taisir Abdallah (Israel)

CITI - A Virtual Center for Innovation and Creative Thinking Implementation in the Middle East
Edna Aphek (Israel)
David Yellin (Israel)

Artistic Appreciation and Expression, Curricular Proposal for Preparing Teachers into Pre-Schooler Education
Bertha EGarcia Gonzalez (Mexico)
Ganett Saleh Gattas (Mexico)
Jeanette Martinez Saleh (Mexico)
Blanca Delia Garcia Gonzalez (Mexico)

Moving From Isolation Through Cross-Cultural Partnership and Linkages in Teacher Education in Southern Africa: Experience from the University of North-West, South Africa
Hassan Omari Kaya (South Africa)
Phineas Mabetoa (South Africa)

Nationalism and Globalization in Teacher Education
Ali A. Modsa (Saudi Arabia)

Declining Male Enrollment in Schools: The Boy-Child Problem
Alice N. Ndu (Nigeria)

PART V: FINAL WORLD ASSEMLBY REPORT AND RECOMMENDATIONS SUBMITTED BY ICET TO UNESCO *(See Vol. II)*

A Comparison of the Recommendations from Two Conference:

Teacher Education and School Reform:
The 1996 ICET World Assembly
Amman, Hashemite Kingdom of Jordan
December 16-21

And

Strengthening the Role of Teachers in a Changing World:
UNESCO's International Bureau of Education
1996 International Conference on Education
Geneva, Switzerland

INDEX OF AUTHORS

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ICET is most grateful to His Majesty King Hussein for bestowing the high honor of his patronage. ICET also wishes to extend its profound appreciation and warmest gratitude to His Royal Highness Crown Prince El-Hassan who presided as Chairman of the World Assembly and inspired World Assembly participants with his exceptional Intellectual insights as the *Keynote Frank H. Klassen Lecturer.*

ICET appreciates H.E Dr. Abdullah Nsour for his extraordinarily effective leadership as well as our hosts: The Ministry of Higher Education, The Ministry of Education, The National Center for Human Resources Development, and the Jordanian Public Universities, for their sponsorship and generous contributions of time, effort and goodwill in the planning and production of the 1996 World Assembly.

ICET extends a special thanks for the exceptional work accomplished to prepare for publication of the 1996 *International Yearbook on Teacher* Education. This volume would not have been possible without Dr. Victor Billeh, the outstanding professional staff at the National Center for Human Resources Development, Dr. Ahmad Majdoubeh, Mr. Yousef Awad and the University of Jordan Students.

Finally, special thanks are extended to Dr. Nelly Aleotti Maia who presided as ICET President over the 1996 World Assembly and to ICET staff member Kristy Berry, for her personal dedication and professional contributions.

Sandra J. Klassen
Executive Director

16

PREFACE

The International Yearbook on Teacher Education is a source of global expertise. It provides the reader with a review of current research and innovative programs and practices viewed from an international perspective and offered to improve the quality of teacher education worldwide. The papers and recommendations selected for publication in this 1996 volume are the product of the 43rd ICET World Assembly, hosted by The Jordanian Ministry of Higher Education, The Jordanian Ministry of Education, The National Center for Human Resources Development, and the Jordanian Public Universities under the patronage of His Majesty, King Hussein bin Talal.

To develop this volume, ICET invited eminent educators from Africa; Asia and the Pacific; Europe; the Middle East; South America; Central America and the Caribbean to address the World Assembly Theme: *Teacher Education and School Reform.* The Theme recognized that improving the quality of education is every nation's best development strategy and that improving the quality preparation of a nation's teachers through continuous reform of educational institutions and basic and secondary education policies and curricula is the best pain and the best process to achieve educational excellence and national prosperity.

The World Assembly Theme was supported by plenary sessions and researched-based paper presentations focusing on four Topics:

Topic One

Enhancing Values in School Reform to promote democratic values and practices; develop a democratic pedagogy of school renewal; build a school community; orient school personnel towards planned change; and enhance teaching and learning effectiveness.

Topic Two

Fostering Partnerships in School Reform between schools and universities; within professional development schools; between professional and public schools; and between centers of educational development and public schools.

Topic Three

Preparing Teachers for School Reform through innovations in pre-service teacher education and their likely impact on schools; the role of commitment, empowerment and reflection; and the role of assessment and student support.

Topic Four

Capitalizing of International Collaboration for School Reform by identifying national, regional and international efforts for achieving school reform; and enhancing international networking and collaborative research and development strategies for systemic reform.

Education leaders from Jordan, the United States, the United Kingdom, Switzerland, and Brunei Darussalam were invited as World Assembly keynote and plenary speakers. Their research and analysis comprise PART I, II, and III of this volume.

In PART IV, academic papers are organized by one of the four topics they address.

PART V of this volume includes the World Assembly Communiqué, a synthesis of the salient ideas, issues and policy recommendations presented and deliberated at the 1996 World Assembly.

This volume outlines key issues confronting educators and suggests successful strategies and practices for educators to model in pursuit of quality teacher education and school reform on the local , national, and international level.

Nelly Aleotti Maia
1996 ICET President

INTRODUCTION

The 43rd ICET World Assembly was held in Amman, Jordan, December 16-21, 1996 under the patronage of His Majesty King Hussein bin Talal. His Royal Highness Crown Prince El-Hasan bin Talal has presided as World Assembly Chairman and delivered the Keynote Frank H. Klassen lecture. The Assembly was hosted by the Ministry of Higher Education and the Ministry of Education, as well as Jordanian Public Universities, and the National Center for Human Resources Development.

Participants in the Assembly, who come from 46 countries, were scholars, practitioners, and administrators from universities, colleges, departments, and institutes of education, as well as government agencies and professional organizations.

The 1996 World Assembly theme titled "Teacher Education and School Reform" has addressed a major problem that confronts many school systems on the national, regional, and international levels.

Within the framework of the theme, four topics have been focused on by the plenary and concurrent sessions of the conference. The four topics were as follows:

1. Enhancing Values in School Reform.
2. Fostering Partnerships in School Reform.
3. Preparing Teachers for School Reform.
4. Capitalizing on International Collaboration for school Reform.

Those submitting papers for concurrent sessions were requested to write about research studies and programs addressing one of these topics. Over one hundred papers were presented and discussed in the concurrent sessions. Rapporteurs of all sessions were requested to take notes and conclude all papers presented in the sessions for the purpose of writing the final World Assembly report and recommendations.

Professor Victor Billeh
Professor Kamal Dawani

MESSAGE OF WELCOME

We in the Hashemite Kingdom of Jordan have always prioritized human resource development. Though our country is rich in heritage, geographically central and a good example of political moderation, stability and democratization, its natural and material resources are somewhat limited. This is why, for decades, we have invested in and developed to the best of our ability the skills of our Jordanian citizens.

We believe our educational system can prepare and qualify our young people to serve, participate and contribute in the best way they can. We take pride in this system which, from the start, has been dynamic, progressive and reliable.

However, we are always open to new ideas, and we therefore welcome with great enthusiasm the convening of the 43rd World Assembly of the International Council on Education for Teaching (ICET) in Jordan.

Since the dawn of human civilization, teachers have been the carriers of the torch of knowledge, freedom and welfare of mankind. Schools are the site of most of our formative experiences. We must do all we can to empower teachers and bring about the necessary reforms to make the school environment more congenial to learning.

We therefore look forward to hearing education officials, scholars and teachers debate their views on the ever crucial, though somewhat elusive, question of teacher education and school reform. We welcome your fresh perspectives and we hope the various debates will translate into concrete suggestions which all countries can implement and benefit from.

Thanks to conferences like these, humanity is getting a lot closer to the objective of high quality education for all. We feel privileged and honored to host this important assembly and we are confident that the views which will be exchanged in Amman will make a difference.

We welcome all the participants from the region and beyond to Jordan and **wish you** success in your noble endeavor.

El Hassan bin Talal
Crown Prince of the Hashemite Kingdom of Jordan
December 1996.

MESSAGE OF WELCOME

On behalf of the Board of Directors and Trustees of the International Council on Education for Teaching (ICET), we welcome you and commend your participation at this pivotal 43rd World Assembly, convening in Amman, Hashemite Kingdom of Jordan, December 16-21, 1996.

The 1996 World Assembly theme recognizes that improving the quality of education is every nation's best development strategy and that improving the quality preparation of a nation's teachers through continuous reform of educational institutions and basic and secondary education policies and curricula is the best plan and the best process to achieve educational excellence and national prosperity.

It is auspicious that Jordan's visionary leaders have invited ICET to convene this historical forum to crystallize a ten-year government program, launched in 1987, to systemically reform the quality of education. The Hashemite Kingdom of Jordan is distinguished by its traditional policy emphasis on education for development.

Through His Majesty King Hussein bin Talal's great wisdom, unique leadership and personal dedication to education, participation in education and literacy rates in the Hashemite Kingdom of Jordan are among the highest, and the Jordanian teacher is among the very finest in the region.

The World Assembly Chariman, His Royal Highness Crown Prince El-Hassan bin Talal, has contributed tirelessly to the cause of education. As an exceptional educator and intellectual, His Royal Highness has designed and implemented school projects of outstanding and far-reaching impact on educational excellence in the Hashemite Kingdom of Jordan.

And you, the World's leading education practitioners, scholars, administrators, and policymakers, are the global instruments of reform.

ICET welcomes and pays tribute to this exercise in international partnership.

Together you will examine and discuss national and international research, programs, and strategies which enable teacher education and schools to respond effectively to development needs. This World Assembly provides the opportunity for you to share ideas of innovative practices and successful programs in an atmosphere of mutual benefit and cooperation.

To enlist the resources of the world's education leaders in an ongoing partnership to raise educational quality, ICET is establishing at this World Assembly, a *Consortium for International Cooperation on Teacher Education Policy* whose mission is to:

1. Plan a World Education Policy Forum for the deliberation of policy issues, trends, and innovations in teacher education to be convened annually at the ICET World Assembly; and to

2. Develop International Standards of Excellence for the preparation of teachers.

Your collaborative input to educational reform is the best plan to achieve global educational excellence and prosperity.

Nelly Aleotti Maia
ICET President

Sandra J. Klassen
ICET Executive Director

December 1996

PART (I)

OPENING CEREMONY PRESENTATIONS

Opening Remarks

Dr. Abdullah Nsour
Minister of Higher Education
(Hashemite Kingdom of Jordan)

Your Majesty King Hussein bin Talal
Your Royal Highness Crown Prince El-Hassan bin Talal
Your Excellency President of ICET
Your Excellencies
Ladies and Gentlemen

It is with great honor and pleasure that I stand in your midst today to express both my joy and pride in addressing this distinguished international academic gathering which has brought together from the various parts of the globe a group of outstanding education leaders. It gives me true happiness to convey to you Jordan's feeling of gratitude and appreciation for being privileged to host the forty-third Assembly of the International Council on Education for Teaching (ICET). While I congratulate the ICET on its choice of "*Teacher Education and School Reform*" as a theme for the conference, allow me also to assure you that The Hashemite Kingdom of Jordan fully understands the deep implications of the theme as well as the responsibilities entailed in hosting such an Assembly in this particular place and at this particular point in time.

As for the place, Jordan, represented by its wise leadership, has realized from the start that education is the key to social and economic development. Indeed, education and development are faces of the same coin, for both aim at the advancement, prosperity, and happiness of man.

On the basis of this essential premise, Jordan has, for the past three decades, devoted a great deal of attention to education and made it a national priority. Quantitatively, education has expanded beyond all expectations. The number of those going to school in the Kingdom has totaled a million and a quarter, out of the four million inhabitants of the country in other words, 33% of the entire population. And this is one of the highest ratios in the world. The enrollment rates of students in elementary school, middle school, and senior secondary school are almost 100% 90%, and 70% respectively. These are among the highest in the Middle East Region, and are equal to those which are to be found in the most advanced countries. This quantitative expansion is not limited to general education; it extends to encompass the universities and community colleges. At present, we have twenty universities (seven public and thirteen private) as well as fifty community colleges. According to the same report, the total number of students currently enrollee at universities and community colleges is about one hundred thousand. This makes Jordan occupy the third place development institutionally after The United States and Sweden, with respect to enrollment in higher educational institutions.

Timewise, the convening of this international educational assembly comes at a moment when Jordan is implementing its 10-year Educational Reform Plan (1990-1999) which focuses on revising the input, processes, and output of the Jordanian educational system, upon the completion of its quantitative expansion by the end of the 90s. It is no mere coincidence that your assembly has chosen to debate the subject of teacher education and school reform at a time when the Educational Development Plan in Jordan has made the teacher and school education one of its fundamental components. Jordan shares with your assembly the concern over the status of the teacher and school reform, on the premise that the teacher is a fundamental part of the educational system, a vital element in the realization of educational objectives, and a cornerstone in educational development and reform. The social, economic, and political changes and the revolution in science and technology at the international, regional, and national levels have made it a necessity for the teacher to perform new roles and face new challenges, especially since the twenty-first century is fast approaching. Jordan also agrees fully with you that it is in the end a teacher fully trained and prepared through the various teacher education institutions who will determine the quality of education which learners receive. It goes without saying then that the success of the educational process and the skillful realization of its goals depend on the role carried out by the teacher in the school itself. Since teaching is a profession and a craft, like other professions and crafts, the teacher's fulfillment of his/her role stems directly from the degree of effectiveness which teacher education programs enjoy and the ability of such programs to endow the teacher with the necessary qualifications required by the nature of his/her mission.

I am fully confident that this assembly will greatly enrich our experience with education here in The Hashemite Kingdom of Jordan. We shall learn a lot from you, and we wholeheartedly believe in the saying that the whole world is now-- due to the revolution in communications, information, computers, and satellites-- a small global village indeed.

El-Hussein 's Jordan, which embraces firmly His Majesty 's slogan "The citizen is our most valuable asset", possesses a staunch belief that the development of human resources exceeds ten-fold, in terms of its ultimate value, the development of material resources. Jordan looks forward to enriching its educational experience through hosting and participating in (this), this gathering and to shouldering its leadership role in educational development throughout the whole region. There is no place in the world of the twenty-first century except for those countries whose educational systems excel and distinguish themselves. And such distinction and excellence will be brought about only through excelling and distinguished teachers.

Allow me on this occasion to recall with you the tenth recommendation of the First National Conference for Educational Reform which was held in Amman in 1987 concerning teacher training and qualification. The recommendation stressed the creation of advanced types of teacher-education programs, the reconsideration of existing ones, and the constant training of teachers. The recommendation also called for the upgrading of teacher's performance in service through reliable certification programs designed to cater to the needs of all teachers with tile aim of enhancing their academic as well as moral values. Emphasis is placed on enriching their experience, updating their methods of teaching, and deepening their skills. In addition, the recommendation underscored the creation of legislation to consolidate the profession and enable it to occupy a competitive status amidst the other professions as well as the reassessment of the profession 's requirements, specifying the Bachelor 's degree plus a diploma in education as the minimum requirement for teaching.

Finally, in the name of the National Committee of this World Assembly and on behalf of the The Hashemite Kingdom of Jordan, I extend my sincerest thanks and deepest appreciation to the International Council on Education for Teaching (ICET) for taking the initiative to hold this assembly, which is comprised of a distinguished group of experts from all over the world, in Amman . Jordan's appreciation for the important role which ICET shoulders is reflected not only in Jordan's active participation in this conference here but in all the functions and conferences which ICET holds abroad

I wish your conference great success in achieving its aspirations and goals, and I welcome you in the hospitable Kingdom of Jordan, the land of history and civilization--the society of democracy, pluralism, and peace.

Peace be upon you all.
(or Wassalamu Alaykum Warahmatu Allah Wabarakatuh)

43 ICET World Assembly · Amman, Jordan
1996

Opening remarks

Nelly Aleotti Maia
President

With the permission of His Royal Highness Prince Hassan we shall deliver these brief Frostings and opening remarks to the 43'° ICET World Assembly.

In the first place we wish to extend our greatest thanks end express our warmest gratitude to His Royal Highness and His Majesty King Hussein for honoring us with opening and patronizing this important gathering. His Majesty has given to education in the Hashemite Kingdom of Jordan a great deal of time and has lent it His direct personal attention and support. The results of Such vision and dedication are known to people not only in your part of the world but in the world at large. The Jordanian teachers are among the very best and finest in the region, due to His constant care and encouragement, and the Jordanian students are receiving solid' challenging and effective education throughout the country Including the remotest erects. The results on the ground reflect great wisdom and unique leadership.

We are also greatly honored and privileged to have His Royal Highness Crown Prince Hassan preside over the Assembly. His Royal Highness, throughout His illustrious career, has contributed tirelessly to the cause of education. Not only is he himself an intellectual educator, and man of great vision, but the various idea he translated into reality and the various projects within the realm of schooling he brought into existence are telling examples of how one can best Improve education In one's country.

In the second place we wish, as the President of ICET, to extend our welcome to the participants of this World Assembly and share some thoughts on teacher education with them.

In ancient times scholars conceived the world as compose of many concentric spheres: one with air, one with Sun Moon and stars and so on, Though we know that geographically or cosmographically Such representation of the world is not correct it is still valid if we relate it to Mankind in life and action.

In fact, we live in different spheres: our family, our nation, our religion, our position, our profession.

But, it on one hand these spheres may be totally independent and even never touch each other, on the Other hand, there is one sphere that comprehends all others: it is education. Education encompasses family, country, religion, work. It is the great sphere that transcends, goes beyond all sectors of human activity. It is the basis and aim of Mankind. One needs education to build a family, to work, to grasp spiritual values and to live abiding by moral standards. Education turns a biological organism into a human being. And a human being is someone who is able to live adequately in any of the spheres we mentioned and, moreover, one who Is capable of choosing, of selecting the right values and of living coherently with these choices.

But, it is also an evident truth that education is not something that happens spontaneously, or takes piece as a simply natural phenomenon. It needs care, work, insight, dedication. The human being is not a rock or a piece of wood. We are living and all that lives needs care. A flower may spring from a plant, but a beautiful garden needs a gardener. To educate people educators are needed and educators need to be formed, ICET is the only and unique organization dealing with teacher education regardless of nationality, political systems different languages and styles of living. It circles on the great sphere. And this World Assembly is happening in an ancient part of the world, on a cradle of civilization, where History has its cultural roofs with the oldest cities known. And where there is a city there is education. So here is also a place where education started.

In the coming days, with the generous hospitality of His Majesty and the support of the educational authorities of Jordan (to whom we extend our deepest gratitude) we shall honor this site. We shall once more discuss, debate, exchange experiences on teacher education.

Let us work and face the challenge.
Thank you

ICET Distinguished Fellow Award
1996 Recipient: His Royal Highness, Crown Prince *El-Hassan bin Talal of the Hashemite Kingdom of Jordan*

The ICET Board of Directors established the Distinguished Fellow Award to recognize outstanding leadership in international education. The title of Distinguished Fellow of the International Council on Education for Teaching, *honoris cause,* is conferred upon individuals who have made significant achievements in their national arenas and substantial contributions to international education which have been emulated or adopted by the education community worldwide. The award ceremony takes place during the annual World Assembly.

His Royal Highness has played a fundamental role in initiating and sustaining National Jordanian Development plans. Over the past two decades, His Royal Highness has personally founded a large number of educational and scientific institutions, which epitomize his vision. His Royal Highness has always shown and practiced his enthusiasm for reform with unwavering focus on human values and multi-culturalism. His Royal Highness's relentless efforts in learning from the experience of Jordanian schools first hand, and his persistence in attending working sessions of committees was instrumental in putting a comprehensive and coherent Ten years Educational Reform Programme for Jordan. Moreover, His Royal Highness was the initiator of the "New International Humanitarian Order", and the founder and co-chairperson of the Independent Commission on International Humanitarian issues.

29

ICET Distinguished Fellow Award
1996 Recipient: His Excellency, Ali Mohamed Fakhro

The ICET Board of Directors established the Distinguished Fellow Award to recognize outstanding leadership in international education. The title of Distinguished Fellow of the International Council on Education for Teaching, *honoris cause,* is conferred upon individuals who have made significant achievements in their national arenas and substantial contributions to international education which have been emulated or adopted by the education community worldwide. The award ceremony takes place during the annual World Assembly.

Dr. Fakhro played an effective and daring role in his country, the Arab world and the international arena, in the field of health as a Minister of Health, and in the field of education as a Minister of Education. In his country, he brought about radical, progressive and total reforms in both fields: examples are the establishment of a modern network of primary health care, the founding of a college of health sciences, the founding of a regional school of medicine, the establishment of a national university and a regional university, the reduction of illiteracy from 25% to 8% in 10 years, the adoption of a credit hour system at secondary schools, and the training of thousands of teachers as part of professionalization of education in his country.

At the regional level and international level, he advocated in both fields, policies that were progressive, humanitarian, coordinated, and always within the advocacy of equity and justice especially for women and the marginalized. Accordingly, he was a member of numerous national, regional, and international committees, boards of trustees and conferences.

PART (II)

KEYNOTE FRANK H. KLASSEN LECTURE

TEACHER EDUCATION AND SCHOOL REFORM IN A CHANGING WORLD

Key Note Speech
"Frank H. Klassen Lecture"
of
His Royal Highness
Crown Prince El Hassan bin Talal
to the Forty - Third (ICET World Assembly)

Amman, Jordan - December 16, 1996

Dr. NellyMaia - ICET President
Your Excellencies Ministers of Higher Education, Education, and Culture
Distinguished Chairs and Members of the Board of Trustees and Board of Directors
Distinguished Education and Business Leaders

Ladies and Gentlemen

On behalf of His Majesty the King, who today is opening a conference including the participation of leading political figures of political parties in the Arab world, at the same time as the opening of this conference on education. Let me say, that in the division of responsibilities, I have got the better deal. I hope, that in the caricature image of politicians the world over, that they too will be singing "a better life for you and for me" and not a better life for me and for me. However, I have a double duty to perform today - a keynote speech. By the time I have finished with it and with you, it will probably sound more like a turnkey speech and I am not here to present turnkey solutions as well as a lecture - The Frank H. Klassen Lecture, celebrating the memory of a man who has had considerable impact on international teacher education and educational opportunities for countless, thousands of men, women and children.

I would like to say that in this Middle East region, the Arab world, West Asian, Middle East North Africa region - however you define it - you come to Jordan which is in a sense a linchpin'a hub geopolitically, of a region where past legacies, future visions, nagging fears and promising hopes will hopefully melt in what we sometimes describe as a melting pot. Conflicting interest, unifying forces of national states, however - particularly in these few days as you visit Amman, are still in a state of agitation with the dynamics of peace making and peace building in a state of perpetual transition for the better, we hope.

There are forward-looking forces who are leading the way towards a global society, a global economy and other groups and vested interests, who remain within the cycle of violence that has plagued the region for far too long. We must not allow the forces of restraint on the idea of one world, on the idea of a universal ethic, to be taken too seriously, if we are to participate in the end of this millennium and the beginning of the 21st century in a shared agenda, a shared universal education, which should and can be, a force in itself for positive change.

We speak of this region as a cradle of civilisation. We speak of the Holy Land of Abraham receiving a covenant from God, where Moses, Jesus Christ and the Prophet Muhammad spread their message of peace and faith, and yet unless and until we can develop a shared commitment to universal values, to universal ethics, it is going to be very difficult to speak to the young, to educate in the context of shared obligations, in the context of shared demonstrable commitment to a canon of ethics in which peace making can develop in itself, into the culture that it rightly is, by the definition of believers whomsoever and wheresoever they may be. I think that the term of Confucius comes to mind when he says *"When you see a worthy person, endeavour to emulate him; when you see an unworthy person, then examine your inner self'.* We are here to exchange views. We are proud of our respective cultural heritages and we are here to say to those, who believe in the clash of civilisations, that we can examine our inner self and that we can avoid the perpetuation of crash and confrontation and move towards scenarios of reconciliation in shared values, in shared absolutes between the young - the hope for the future.

Our investment in education is recognised as an investment in human resource development. This country abounds in human resources, with a vast potential for development. Human capital is highly valued and its focus is upon the wholesome development of values, knowledge, skills, altitudes and beliefs, in a society which in a few short decades has moved from early beginnings to sharing in global education and in a society which prides itself on hundreds of thousands, if not millions, of migrants in the first world. We have enabled our people to become productive contributors to a global community as well as to a regional community. In a global village and indeed in certain instances, in a global city.

We speak of global economy, however, which in a sense is a cliché. It is a euphemism, a polite way of saying, "Yes, we do share in a global village and yet, I think that in a sense here, we need to discuss disparity, disparity of standards, disparity achievement and I hope that a day will come where the interchange of teachers and educators in a school here, or in a school in Brazil, can be a normal progression, not south/south or south/north or characterised by some other cliché, but a normal communication of human values and a shared commitment to the absolute of education.

Since our inception as a modern state, our efforts have been tireless in eradicating illiteracy providing education to all citizens, a quantitative measure if you will, of the economic commitment to human resource development. That these efforts have borne fruit is clear. By the time the World Declaration of Education For All was sounded in Thailand in 1990, Jordan had achieved impressive enrolment rates of 98% for children up to the age of 12 and 80% for the 12-18 age group. The educational system provided free end compulsory education for all children up to the age of 15, which was extended to the age of 16 in 1990 under the educational reform plan. I would just like to remind you that in 1990 Jordan received 1.5 million refugees; 300,000 or so who remained in Jordan. We had to find 78,000 school seats for children in the elementary school alone, in a few short months. We had been hoping to remove -the two- shift system in education totally and the social impact of the Gulf crisis and the Gulf war in itself was one of the major retarding elements in our education reform programme. However, the student/teacher ratio in Jordan is 20 compared to 30 for the world and 18 for the industrial countries.

The rapid expansion of the educational system, for reasons including compulsory mass migration, has eroded quality. Although it effectively served Jordan's needs during the sixties and seventies, it was losing its momentum in the rapidly changing social and economic conditions in both the country and the region.

During that same period, there was a new level of educational awareness worldwide, about the importance of qualitative education, not only for the development of the individual, but also for the development and progress of national economies throughout the world. Many countries have exerted a great deal of effort and money on educational reform. For Jordan, the time and conditions were ripe to set in motion the wheels of far-reaching educational reform.

After several years of effort to prepare a solid foundation, we launched a comprehensive educational reform plan in 1987. It was designed to restructure its basic and secondary educational system to meet the educational challenges of our rapidly changing world.

However, let me point very clearly that there is a missing link between macroeconomics indicators and the feelings of the people who have negative sentiments towards those macroeconomic achievements. There are several reasons for these negative sentiments. Some could be explained by looking at the published indicators from a different angle. Some could be explained by facts, solutions - let us look more at supply and demand to address the subject of employment more directly. Others could be explained by further investigating and looking at other specific indicators concerning social development.

This country spends 14% of its budget - more than 4.5% of its GDP on education -- which is an acceptable level even in industrialised countries. On the other hand, a major problem that Jordan is facing is the fact that the growth of population has been high - three major mass migrations of refugees.. The population increased from 2.8 million in 1987 to 4.2 million in 1995 (an average of 5.5%). The Jordanian Government is continuously facing the issue of balancing between restructuring its economy and improving services to its population, including the refugees who also enjoy the subsidies paid by the Government. Jordan spends an annual $300 million on refugees (1.2 million registered refugees in 1995) and we feel that it is our responsibility to further improve the social conditions and what is more important, the social productivity of our population comprehensively on a non-discriminatory basis.

Ladies and Gentlemen:

Today's societies expect education in the absolute to be the primary driving force in social and economic progress. Our industries, for example, expect to improve the quality of their products so as to qualify for ISO 9000 and 14000, for environment and hopefully for human environment and subsequently to reach international markets beyond the region. But they cannot achieve this objective unless their education and training institutions place the highest emphasis on quality in education and training, ensuring that the good work done in the earlier years of general education consolidated with the final product that can play a vital and relevant role in human resource development.

The revolution in communication and information technologies plays its part in forcing the education and training systems to set aside traditional ways and means of providing education and training and adopting state-of-the-art, effective and modern methods and practices. I wish I could communicate all of this with a paper-tree lecture, but somebody wants the paper for after the lecture. But as with this lecture, this is not a one-shot event, but a continuous process. In addition to constant upgrading of quality, educational establishments of all hues must expand their activities to provide for continuing education and life-long learning.

Education is the key to human development and a major means of human resource development. However, it does not take place in isolation from the efforts exerted by other sectors - inter-related sectors: social, cultural, economic as well as political.

Given the linkages and interactions between human resource development and the policies and activities of other sectors, the extent to which developmental efforts will succeed in achieving their goals would be determined largely by the policy nexus in which education and training systems are designed.

Jordan has attempted to adjust promptly to the combined forces of both latent and sudden changes caused mainly by extraneous factors in the normal course of its development, as I have mentioned earlier.

We have committed ourselves to striking a balance between natural and human resources to achieve sustainable development of national economy. In fact our national information system juxtaposes human resource development, natural resource development and economic indicators.

Structural changes in the market economy accompanied by concurrent changes in social and demographic structures recent developments in the agricultural, health and industrial sectors have demanded a bold and dynamic policy for human resource development.

The United Nations Development Programme has developed a measure for human development - the human development index which takes into account many social, cultural, educational and health factors among other things. As a result, many countries, including this region have started issuing their own national human development reports based on human development indicators that they feel are appropriate.

Concerned and specialised agencies in Jordan have prepared a human resource development strategy. This strategy takes into consideration, in conjunction with the labour market demands, age and geographical distribution. I am talking about a commitment for over a decade with those teachers and their students and schools all over Jordan and I am trying to bring the regional to the global by saying once again, that if we want to move from education as an absolute value from screw-driver industries and sub-standard products, to a specialised labour force in a country that produces, in the context of international agreements with European Union for example, with the WTO, we need to move from the substitution industries on which we concentrated in the 70s and 80s. In the nineties, we are emphasising export-oriented industries and all these factors, require the human resource development, constantly vigilant, dynamic and adaptable and ready to change the demands of the employment markets in all sectors of the nation as well as regional economies.

The prime objective of educational reform in Jordan is to enhance student achievement by improving educational quality and school effectiveness and to increase the relevance of education to current needs and future challenges, facing the country in the regional and the global context. We conceptualise quality in education in terms of forward-looking, all-embracing human, social, cultural and spiritual values, accompanied by a responsible understanding of relevant global issues. Upgrading educational quality thus requires creating learning environments that foster not only knowledge but also attitudes, values and skills required for living a meaningful and productive life in an increasingly complex and rapidly-changing world.

Of necessity, this requires teaching-learning processes that create awareness, foster understanding and appreciation of the inter-dependent, interactive nature of a contemporary world. Global issues related to human rights, conflicts, environmental degradation, ecological imbalance, social and economic inequities, diverse values and beliefs of different communities, respect of the other, need to be sympathetically understood, appraised, and resolved with justice, equanimity and humanity.

To respond to the changing needs of a changing world, schools must reform their educational structure, and teachers must acquire new knowledge, skills and attitudes to provide quality education. Schools and teachers should create learning climates that inspire students to reflect upon and openly discuss real problems and issues facing them, their communities, their countries, their regions, and humanity at large. They should be able to encourage students to find alternative solutions and communicate their preferences in a sensitive and humane way.

This would involve transforming conventional schools and classrooms into dynamic creative environments that provide for constructive inter-personal communication, problem-solving and consensual decision-making. Consensual, Ladies and Gentlemen, we speak of future, not of government, but of governance, not of government and parliament end judiciary, but of civic society, of a consensual interaction which should start in embryo, in dialogue in schools. Schooling must generate teaching-learning processes that facilitate the development of critical thinking tempered by humanitarian values, as well as scientific and artistic creativity, social responsibility and effective communication skills. Educational environment must be conducive to promoting such personal characteristics and we are highly individualistic people, as well as contributing to a shared group ethic. Therefore a positive self-concept, self-confidence, tolerance for divergent views, understanding and appreciation of diverse cultural values, beliefs and social practices, sensitivity to the feelings of others and above all, respect for human rights, freedom, dignity and respect for the integrity of the global environment and ecology, must be sustained. Sensitivity expressed by these children must be sustained through university campus life, where our young students, boys and girls, segregated as they are after the hours of university education, retire to their home, switch on the television and become experts on the day to day politics of this troubled region. We need greater emphasis on positive contribution and extra activities, if we are to build the citizen of tomorrow.

Education does not take place in a vacuum. It takes place in the social, economic, cultural, and religious contexts of communities. Learning, therefore, that has no bearing on the real lives of people is barren. Learning is valued for its practical applications.

This idèa is not new. John Dewy described instruction that did not relate to problems *"already stirring in the child's experience"* as *"worse than useless"*. Let us all find the child in ourselves and contemplate this dictum. Let us all take the other a little more seriously and ourselves a little less seriously. The current and imminent challenges that we face call upon the global educator community to prepare teachers to impart learning that would have practical applications to the real lives of ordinary men and women in a rapidly changing world. A world of shrinking space, of information superhighways, of mindboggling multimedia technologies, of biotechnologies whose yet unknown potential offers prospects which are as dangerous as they are thrilling. People in the 21st century will live under economic, social, cultural and technological conditions unknown to us. To cope with novel problems, future citizens will have to be equipped with appropriate knowledge, skills and capabilities. To produce such citizens, teachers and the education system needs to undergo drastic changes.

We need innovative teaching and learning methodologies, alternative education delivery systems tailored to fit, not teachers' conceptions (or misconceptions) of what learners need, although by all means I would like to say further participation - hands-on participation, but the actual individual needs of the various types of learners. Not only does the role of teachers need to be redefined to allow more room for the student to function, manouvre and move freely, but the teacher's own personality is a crucial factor in the teacher/learning experience.

Students learn a lot better from teachers whom they like, admire and believe in. Teacher education programmes therefore, must develop ways of influencing positively not only teachers' knowledge and methods of teaching, but also their very personal traits.

It is a formidable challenge for teachers I know, who have to commute for several hours from A to B to teach one lesson, who are deprived of housing and other basic needs, which we are hoping to provide in that interdisciplinary approach. Yet, educational systems of today need to be ahead of the game, to harness scientific knowledge and technological know-how to provide the right education which helps produce good citizens for the type of society we envisage. Although the broad goal of education still remains the development of the all-round person as a whole, there is going to be a powerful shift, if this is achievement, in the profile of a good citizen of tomorrow. Knowledge, skills, attitudes, values, beliefs, aspects of behavior and modalities of action will change. We are not talking about macroeconomic indicators, we are talking about microeconomic management of the most important resource - the human being. The emphasis will be, not on the quality of life, which would find the price of food the same as it was relatively a decade ago, but on the quality of giving, on the quality of contributing more possibly than on the quantity of receiving material goods in the consumer society.

Educational reform aims generally at enhancing critical thinking and other high cognitive capabilities among children. Emphasis on developing thinking skills rather than on the acquisition of factual knowledge is rightly placed, for ideas can open new mental horizons, new windows to understanding the world. Even simple ideas can give insight into new aspects of the world that are sources of wondrous knowledge and excitement.

Nevertheless, while focusing upon thinking skills, the complex relationships between thinking and feeling, intellect and emotion, should not be overlooked, for the connection between them is central to wholesome human development. I underline the importance of attitudes and feelings in education because in pursuit of intellectual development, the development of interpersonal communication and social skills has largely been left to itself.

This is not to imply that teachers have been unaware of the critical role of attitudes, beliefs, values, perceptions, feelings and emotions in all-round human development, or for that matter in academic learning and achievement. It is to underscore that giving affective and social meaning, emphasis which is rightfully deserved, both in curricula and classroom teaching and learning, is no less a challenge for teachers and educators.

Given the inborn development blueprint of the child, it is well-recognised that the social and cultural environment determines the ways in which the child's development potential will be realised. It is the culture that determines which objects, which persons, which beliefs and which practices are to be valued and which language is to be spoken. In our discussions between Christian and Muslim believers, we have focused on the subject of education and I would like once again to say that what brings us together is far, far, far more than what separates us. I hope that this idea inter-cultural dialogue can be humanised at the school level more effectively in the future.

Children learn to establish and verify perceptions and beliefs about the world with their usual sincerity and honesty, nor only through direct teaching but through observing the behavior of the people in the family and community who are important in their lives, with whom they have social and emotionalties. Patterns of social interaction within the community culture, guide children's development and provide the frame of reference with which they identify themselves.

Social capital consists of norms of behavior, social conduct, sets of values and mutual trust generated by inter-personal relations among the members of a given community. Social capital thus offers a rich potential in the service of education. However, not all community environments are equally healthy. We have evidence of growing school violence. Last year I went to condole the first Jordan school fatality of a youngster at the schoolyard at ten o'clock in the morning. There is increased substance abuse and various types of pernicious addictions among school populations. All this points to the potential in certain areas of deteriorating moral, cultural, and spiritual values in modern society. It also points to the need for example setting, with teams of educators to move to less privileged schools and areas to contribute to raising their standards.

It might be worth our while increasing our investment in social capital so that its potential can be utilized to produce a sobering effect on student populations. How to harness social and local community resources in the service of education is a challenge not only to teacher education, but to the teacher, to the health worker, to the agricultural extension officer, to the rounded concept of that hackneyed agent of social change in our villages and in our region, which somehow weeds out bureaucracies the way they are - this, we have not yet been able to develop. Maybe this is an excellent opportunity for us in this part of the world and for concerned people world wide to exert a greater effort to encourage the business community to be increasingly involved in education.

For investment in education and qualitative education brings rewards equal to those gained in the market place. To this end, we need to come up in this particular gathering, and others, with specific implementable strategies which make such an involvement a reality.

Teacher education and training faces the further challenge of a paradigm shift from conventional to innovative pedagogy. This requires a large investment of time and effort in professional development on the pert of the teachers. On the other hand, it requires great effort and commitment on the part of the institutions responsible for teacher education and training. For they must radically reformulate and restructure their teacher preparation programmes to make them responsive to the challenges of the 21 st century.

We are all aware that student learning experiences are a function of the overall organisational ability of the schools they attend to create a conducive learning environment. Although teachers function within the administrative structure of schools, they are largely responsible for creating classroom environments that facilitate and stimulate student learning.

Teachers all over the world and especially in developing countries, generally lack the knowledge and skills to effectively implement newly constructed curricula. It is all very well to come up with a wonderful glossy book, but what about our social development curriculum? We have done well in figures, have we done well in citizenship? *"If he doesn't have it., he can't give of himself."* This requires a deeper and more conceptual understanding of the curricular content and teaching strategies that foster creativity and self learning and that are tailored to the developmental needs of each individual child. In addition, it requires a set of new assessment strategies that identify both knowledge and performance levels of the students in the cognitive, effective and social domains.

The complexity and enormity of the teachers' role is further underlined by the reality of multi-ethnic, multilingual, multicultural classrooms with a wide range of ability and of student needs in many countries, particularly in the conglomerate industrial cities.

It is evident that the teacher is at the heart of all educational change. If educational reforms are to achieve their human development goals, then their primary human resource (their teachers) must be adequately developed first. The ultimate success or failure of an educational reform programme rests with the teacher in the classroom, who is the creator and organiser of effective learning environments - human environments - and situations that facilitate the acquisition of desirable knowledge, concepts, and skills, both in end outside the school.

Achieving the noble objective, Ladies and Gentlemen, of Education For All consumes substantial resources and requires a sustained concerted effort in developing countries. But improvement of established educational systems, in order to respond to the educational needs of the 21 st century, requires radical changes. This is, perhaps, the most formidable challenge -- even for highly industrialized countries.

Meeting the challenges that face education calls for a radical reformulation and restructuring of current teacher education and training programs with respect to the enormous complexity of the new role and responsibilities of the teachers. Implementation of reform demands teachers, work to be much more complex and teachers' knowledge and skills to be much more specialized and diversified than they have been so far.

This brings us to the theme of this 43rd ICET World Assembly; Teacher Education and School Reform. It is an apt and timely theme for most countries undergoing educational reform and particularly for us here in Jordan, where the teacher plays the most critical role in realising reform goals and ideals.

With the changing concept of education, teacher education has to undergo significant adjustment. In the highly compteetive global economy, the job market is also going to be increasingly competive. The nature of jobs, the classifiction of jobs and skills, will change and a growing number of people will have several jobs and occupations during one life cycle.

This will require continuous adjustment and life-long education for the people. The teacher education community has to be prepared to respond to these challenges. They are global challenges. Obviously, no educational system, no country , big or small, developing or advanced, has the ability to meet them single-handed. They call for a collective and copperative effort by all peoples, by all nations.

The vision is clear to us, but the way to realise it is not. We do not yet know what courses of action to adopt and it is relevant to a meeting such as this to contibute to the substance and to the script and on the dawn of human civilization, teachers have caried the torch of knowledge and freedom and the welfare of mankind.

Schools have been the venue for the most formative experinces. We must do all we can to empower teachers and bring about the necessary reforms to make the school enviornment more congenial to learning.

We look forward to hearing education officials, scholars, business leaders, and teahcers exchange views on the ever crucial, through rather elusive, question of teacher education and school reform. We welcome your fresh pespectives and we hope that the various debates and dialogue will be translated into concrete suggestions which all countries can implement, in bringing about the desirable outcome.

In conclusion, I would like to say that in studies of Jordanian youth, it has been brought to my attention that we have more that is anecdotal than that which is empirical. More empirical research should be undertaken to convince civic society to change its attitude to the worth of education. I hope that I can say in hindsight, that it is thanks to conferences such as these, that the goal for education for all is yet more meaningful.

We feel privileged and honored to host this important assembly and we are confident that the exchanges here in Amman will contribute to a positive change.

I think it was again the Chinese who said "Kindness in words creates confidence, kindness in thinking creates profoundness, kindness in giving creates love". I hope that our love of this art of teaching and our love for our fellow human being will contribute to their better future.

Thank you ladies and gentlemen.

PART (III)

PLENARY SESSION ADDRESSES

ENHANCING VALUES IN SCHOOL REFORM

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Excellencies, Distinguished Guests, ladies and gentlemen, I am delighted to present this plenary session on Enhancing Values In School Reform This morning's speech by Crown Prince El Hassan bin Talal certainly focused our attention on school reform and democratic values As *we explore the topic of enhancing values in school reform*, two quotations set the stage for our journey:

We gave the world new ways to dream. Everyone needs new ways to dream.

Sunset Boulevard

Issues should not be seen as threats, they should be seen as opportunities for gaining new insights.

Glen Mass, Kimball Wiles, Joseph Bondi

In the musical Sunset Boulevard, the aging silent movie queen Norma Desmond, whose movies gave the world new ways to dream reminds us that educators must give students new ways to dream and, of course, we must always view issues, some of which are controversial, as opportunities to gain new insights.

This afternoon, I have divided my address into the following five parts which correspond to the five subthemes of the conference.

- Promoting Democratic Values and Practices
- Developing a Democratic Pedagogy of School Renewal
- Building a School Community
- Orienting School Personnel Toward Planned Change
- Enhancing Teaching and Learning Effectiveness

Let us turn to the first of these topics.

Promoting Democratic Values and Practices

One must clearly distinguish between democracy as a form of government and democracy as a way to think about schools and classrooms. This afternoon we are only concerned with the latter. Michael Apple helps us to think about democratic schools when he presents the following ideas:

1. *The characteristics of democratic schools include:*
    a. Participation in issues of governance and policy making.
    b. Participation in communities of learning.
    c. Commitment to diversity.
    d. Curriculum of exploration. (Apple, 1995)
2. *The concerns of democratic schools are these:*

a. The open flow of ideas, regardless of their popularity, that enables people to be as fully informed as possible.
b. Faith in the individual and collective capacity of people to create possibilities for resolving problems.
c. The use of critical reflection and analysis to evaluate ideas, problems, and policies.
d. Concern for the welfare of others and "the common good."
e. Concern for the dignity and rights of individuals and minorities.
f. An understanding that democracy is not so much an "ideal" to be pursued as an "idealized" set of values that we must live and that must guide our lives as people.
g. The organization of social institutions to promote and extend the democratic way of Life. (Apple, 1995).

Two exercises that underscore this use of democratic principles are suggested by Charles Kniker and Jerry Patterson. Charles Kniker gives us the first of these values exercise.

Value Identification:

Moving Day " For adults.

- Activity: Through discussion of the results of the moving inventory, participants reveal their values concerning nostalgic and material possessions.
- Learning Aids: A handout containing a list of items to be considered for the move.
- Provide pencils.
- Unit interactions Specific directions are given at the top of the handout. These 3choices would be the only options the first time they mark the list.
- Evaluation: Class discussion. Main question is on the balance of nostalgic & material possessions.
- Suggestions: Ask participants if the decision would be at all changed if they were moving to London? the South? near their current address? etc.

Value Activity: "Moving Day"

Americans move at an amazing pace-often from homes to apartments And, many moves cover long distances All moves, though, have one common characteristic the person moving is forced to make decisions about what to take and what not to take.

Let's suppose that you are moving from a house to an apartment in San Francisco. The following is a list of items about which you must decide. Mark the item M if you wish to move it to your new home, S if you wish to sell it, or T if you wish to dispose of it.

1. Your grandparents' wedding picture.
2. A usable black & white television set.
3. Your elementary school report cards.
4. Your first tooth.
5. Brass bird cage.
6. Outgrown clothes.
7. Old love letters.
8. A high school trophy.
9. A complete set of Elvis Presley records.
10. Wrought-iron wine rack.

11. A hand-made quilt.
12. Baseball card collection.
13. A blooming African violet.
14. A Polaroid camera.
(Kniker, 1977)

As you can see, a student has an opportunity to explore his/her values in a non-threatening atmosphere. Jerry Patterson provides us with an exercise to promote a democratic discussion with school staff.

Core Value Exercise

Check the statements below that meet the criteria for core values. You do not necessarily have to agree with the value in order for it to meet the criteria.

1. High school students should be in scheduled activities every period of every day.
2. School districts should experience increases in elementary enrollment in the next several years.
3. Equity should be a primary basis for providing learning opportunities to all students.
4. School districts should allocate resources with students foremost in mind.
5. School districts should offer staff development opportunities during the school day.
6. Schools should experience increased diversity and complexity of student needs during the next decade.
7. Students should be active participants in their own learning.

(Patterson, 1993)

Developing a Democratic Pedagogy of School Renewal

The starting point for developing a democratic pedagogy for school renewal is clearly a needs assessment. Phi Delta Kappa suggests the following exercise for asking a community to rank order school and curricular values. Directions: Rank order the following school values:

- Learn how to be a good citizen
- Learn how to respect and get along with people who think, dress, and act differently.
- Learn about and try to understand the changes that take place in the world.
- Develop skills in reading, writing, speaking and listening.
- Understand and practice democratic ideas and ideals.
- Learn how to examine and use information.
- Understand and practice the skills of family living.
- Learn to respect and get along with people.
- Develop skills to enter a specific field of work.
- Learn how to be a good manager of money, property, and resources.
- Develop a desire for learning now and in the future.
- Learn how to use leisure time.
- Practice and understand the ideas of health and safety.
- Appreciate culture and beauty in the world.
- Gain information needed to make job selections.
- Develop pride in work and a feeling of self-worth.
- Develop good character and self-respect.

– Gain a general education.
(Phi Delta Kappa)

Another source is public surveys. Phi Delta Kappa often conducts polls of citizens that yield results like these:

The Public And The Ideal School

1. Well qualified teachers who pass state exams.
2. Strict discipline.
3. Back to the basis.
4. More in class work and homework.
5. Better parent-school communication.
6. Parenting courses.
7. More career education.

Building A School Community

Ultimately, a school must become a community of learners. Because I have had an opportunity to explore a number of school systems in-depth, I have selected three country approaches to this notion of building a school community. These include New Zealand, Japan, and Singapore.

In New Zealand, something so simple as morning and afternoon tea serves to bring people together to talk about schooling. The Maori and European inhabitants have succeeded in providing a truly multicultural environment. Students can choose single sex schools, if they wish. New Zealanders have recognized that Maori teacher education candidates do not wish to praise themselves; therefore, the marae teacher education interview permits the candidate's entire family an opportunity to speak highly of the candidate. Each of these examples help to foster a community of learning.

In Japan, certain societal norms aid climate building. For example, respect, caring, diligence, stability and commitment serve as society-wide standards to motivate learners. School uniforms instill a sense of loyalty and caring about school in the learners. Strong parent/teacher partnerships result in success. For example, kindergarten teachers often ride the school bus to meet parents and children and to caringly receive children onto their transport to school.

The ABC Factors - autonomy, balance, and coherence - characterize the school climate in Singapore. In addition, a strong sense of appreciation for other cultures has led to true cultural integration. The emphasis on fluency in two or more languages adds to this appreciation. Teachers are seen as counselors who engage in systematic planning for the future and attend carefully to collegiality.

New Zealand, Japan, and Singapore are good examples of how societies build a sense of community.

Orienting School Personnel Toward Planned Change

Certainly, school reform cannot take place without orienting school personnel. Today, the language of school reform has changed from a bureaucratic discourse to an empowerment discourse. The following are the characteristics of each of these discourses:

Language of School Reform

Empowerment Discourse	Bureaucratic Discourse
choice	national standards
ownership	national curriculum
partnership	national assessments
self-management	national monitoring
consumer rights	national performance
protections	production
local control	top down
market driven	systems/structures
decentralization	goals/outcomes
bottom-up	inputs-results

To be truly effective, school reformers must embrace the notion of empowerment. Jerry Patterson in his book, Leadership for Tomorrow's Schools, provides us with some further examples of change and the future. He notes that five values may be viewed from today and tomorrow:

Value 1: Openness to Participation

- Today's Value: Our organization values employees listening to the organization's leaders and doing what the leaders tell them to do.
- Tomorrow's Value: Our organization values employees actively participating in any discussion or decision affecting them.

Value 2: Openness to Diversity

- Today's Value: Our organization values employees falling in line with the overall organizational direction.
- Tomorrow's Value: Our organization values diversity in perspectives leading to a deeper understanding of organizational reality and an enriched knowledge base for decision making.

Value 3: Openness to Conflict

- Today's Value: Our organization values employees communicating a climate of group harmony and happiness.
- Tomorrow's Value: Our organization values employees resolving conflict in a healthy way that leads to stronger solutions for complex issues.

Value 4: Openness to Reflection

- Today's Value: Our organization values employees conveying a climate of decisiveness. Firm decisions or made and implemented without looking back.
- Tomorrow's Value: Our organization values employees reflecting on their own and other's thinking in order to achieve better organizational decisions.

Value 5:Openness to Mistakes

- Today's Value: Our organization values employees concentrating on making no mistakes and working as efficiently as possible.
- Tomorrow's Value: Our organization values employees acknowledging mistakes and learning from them.

(Patterson, 1993)

Another way of looking at an organization is to characterize how it might move from a position of weakness to strength. Again, Patterson offers us a comparison.

Signs of Weakness

Everything is up for grabs:

- Employees all over the organizations give their opinion on any subject.
- Employees express a variety of perspectives which are many tunes in direct opposition to the organizational direction.
- Employees argue about important issues, but resolve their conflicts in a healthy way.
- Employees frequently question organizational leaders and challenge the wisdom of their decisions.
- Employees acknowledge their mistakes and learn from them. Efficiency is not the overriding concern.

Signs of Strength

Everything is on the table:

- Employees actively participate in any decisions affecting them.
- Employees express a variety of perspectives, even if they differ from organizational direction.
- Employees openly resolve conflict with colleagues in a safe environment.
- Employees question their own and others' thinking in a nurturing environment that suspends premature judgments.
- Employees freely admit mistakes and view them as one more way to learn.

Signs of Weakness

Everything's controlled:

- Employees listen to the organization's leaders and do what the leaders tell them to do.
- Employees' views fall in line with the overall organizational direction.
- Employees always convey a climate of group harmony and happiness.
- Employees understand that once decisions are made, there's no turning back.
- Employees focus on making no mistakes and not admitting those they do make.

Signs of Strength

Everything is under control:

- Employees listen to the organization's leaders and do what the leaders tell them to do.
- Employees' views fall in line with the overall organizational direction.
- Employees communicate a climate of group harmony and happiness.
- Employees communicate a climate of decisiveness; firm decisions are made and implemented without looking back.
- Employees concentrate on making no mistakes and working as efficiently as possible.

To focus clearly on orienting school personnel toward planned change, a school district might ask itself these questions. To what extinct does the district:
a) value commitment to the development of the individual within the district?

b) value treating all individuals as significant stockholders in the organization?
c) value a "we" spirit and feeling of ownership in the organization?
d) value empowering employees throughout the district to assist in achieving the mission of the school district?
e) value equal access by all employees to support information and resources?
f) value all employees as equally important members of the organization?
g) believe that employees act in the best interest of students and the organization?
h) value employees as having the expertise to make wise decisions?
i) value investing in the development of employees?
j) value placing decision making as close to the point of implementation as possible?
k) value the opportunity for input in district wide decisions?
l) value decisions being made by those who are directly affected by them?
m) value honesty in words and actions?
n) value consistent, responsible pursuit of that for which we stand?
o) value the unwavering commitment to ethical conduct?
p) value differences in individual philosophy and practices?
q) value differences in perspective?
r) value schools and the children within them celebrating their distinct character?
s) value students as inherently curious learners?
t) value doing whatever it takes to achieve student success?
u) value students being meaningfully engaged in work that has personal value to them?
(Patterson, 1993)

Enhancing Learning and Teaching Effectiveness

There are three school based examples which help us to understand how democratic values help enhance teaching and learning effectiveness. These include the Paideia School: the La Esceula Fratney, and the ORAVA Project.

The Paideia School was developed by Mortimer Adler. A diagram of the curriculum looks like this:

	COLUMN ONE	COLUMN TWO	COLUMN THREE
Goals	ACCUISITION OF ORGANIZED KNOWLEDGE	DEVELOPMENT OF INTELLECTUAL SKILS OF LEARNING	ENLARGED UNDERSTANDING OF IDEAS AND VALUES
	by means of	by means of	by means of
Means	DIDACTIC INSTRUCTION LECTURES AND RESPONSES TEXTBOOKS AND OTHER AIDS	COACHING, EXEPRCISES, AND SUPERVISED PRACTICE	MAIEUTIC OR SOCRATIC QUESTIONING AND ACTIVE PARTICIPATION
	in three areas of subject-matter	in the operation of	in the
Areas Operations and Activities	LANGUAGE, LITERATURE, AND THE FINE ARTS MATHEMATICS AND NATURAL SCIENCE HISTORY, GEOGRAPHY, AND SOCIAL STUDIES	READING, WRITING, SPEAKING, LISTENING CALCULATING, PROBLEM-SOLVING OBSERVING MEASURING, ESTIMATING EXEPCISING CRITICAL JUDGMENT	DISCUSSION OF BOOKS (NOT TEXTBOOKS) AND OTHER WORKS OF ART AND INVOLVEMENT IN ARTISTIC ACTIVITIES e.g., MUSIC, DRAMA, VISUAL ARTS

THE THREE COLUMNS DO NOT CORRESPOND TO SEPARATE COURSES, NOR IS ONE KIND OF TEACHING AND LEARNING NECESSARILY CONFINED TO ANY ONE CLASS.

Mortimer Adler has this to say about the school:

- To give the same quality of schooling to all requires a program of study that is both liberal and general, and that is, in several, crucial, overarching respects, one and the same for every child. All sidetracks, specialized courses, or elective choices must be eliminated Allowing them will always lead a certain number of students to voluntarily downgrade their own education.
- The course of study to be followed in the twelve years of basic schooling should, therefore, be completely required, with only one exception - which foreign language to study.
- But the democratic promise of equal educational opportunity, half fulfilled, is worse than a promise broken. It is an ideal betrayed. Equality of educational opportunity is not, in fact, provided if it means no more than taking all the children into the public

schools for the same number of hours, days, and years. If once there they are divided into the sheep and the goats, into those destined solely for toil and those destined for economic and political leadership and for a quality of life to which all should have access, then the democratic purpose has been undermined by an inadequate system of public schooling. It fails because it has achieved only the same quantity of public schooling, not the same quality This failure is a downright violation of our democratic principles.

The ultimate goal of the educational process is to help human beings become educated persons. Schooling is the preparatory stage; it forms the habit of learning and provides the means for continuing to learn after all schooling is completed (Adler, 1982).

Las Escuela Fratney is located in Milwaukee, Wisconsin. It is a two-way bilingual, multicultural, whole language school, governed by a site-based council. There are 360 students, K-5; 65% are Hispanic; 20% are African American; 13% are white; and 2% are Asian and other.

Nearly all the children are poor. The school characterizes itself as having cooperative learning, a thematic curriculum, critical thinking, parent involvement, shared governance, and links to the community. Children are learning; parents and teachers are happy.

There are six lessons that led to success:

1) Grassroots movements can produce real change.
2) Multiracial unity is essential to successful school reform.
3) Build in time to reflect and learn.
4) Genuine parent involvement is critical.
5) Structures that foster change must be institutionalized.
6) Successful school reform is part of larger societal change efforts.

(Apple, 1995)

Finally, the ORAVA Project offers real hope for democratic school reform. The University of Northern Iowa has received a $2 million grant to broaden its efforts to democratize the educational system in Slovakia. The Orava Project, named for the region of Slovakia in which it commenced, is directed by Northern Iowa College of Education faculty members Kurt Meredith and Jeannie Steele, who have been living in Slovakia since 1994. The project is designed to democratize the Slovak basic school program, while also introducing democratic instructional practices into university teacher preparation programs there.

The following is a bulletin from the project, Dolny Kubin, Slovakia -- In a small room overlooking the main square of this town in the hilly Slovak countryside, 21 teachers from the public schools are discussing their latest attempts to use new instructional techniques. "When we use traditional methods, only the best students participate," says one. "Now, all of them participate, even the weakest ones."

The teachers are reviewing their experiences of the previous week, when they tried "paired reading" with their middle-school classes. The students, working in pairs, read a text, ask each other questions, and then report to the class. In a country with a rigidly conservative approach to schooling, the idea is radical.

The project has been actively embraced by regional school administrators. "We were always taught that students should sit in their seats for the whole class and listen to the teacher," says Maria Didakova, deputy-director of the Orava school district. "But now the rules have changed. Teachers can allow students to move around and participate in the learning process."

Simple things, like school names and mascots, did not exist in Slovakia. "The Slovak teachers saw the connection these symbols (mascots and nicknames) had for school identity, loyalty and pride--and their power to motivate ate students." Another important change Meredith sees is the improvement in Slovak teachers' relationships with parents. "Before, teachers were viewed two ways. On the one hand, the teacher always had some status and importance.

"Today the parents are publishing parents' newsletters; that was unheard of before." Steele believes an important first step is the way Slovak teachers are coming to value their importance as *educators, a* much greater role than they held under the old regime. "In the community it's too early to tell if the wariness toward teachers has been replaced by true respect," she says. "Teachers started working toward conflict resolution in children, where the children create and follow their own rules; they have choices. We have concluded there is much more faith in the child from the position of the teacher. The child has more freedom, but more responsibility, because the child is forming knowledge, becoming responsible for actions.

Clearly, these three examples help us to understand democratic values in action.

CONCLUSION

What I hope we have learned this afternoon from our discussion of enhancing values in school reform is that the use of democratic values might just help us to create more memorable days for our students. Charles Dickens in Great Expectations provides a fitting conclusion to my remarks.

That was a memorable day to me, for it made great changes in me. But it is the same with any life. Imagine one selected day struck out of it, and think how different its course would have been. Pause you who read this, and think for a moment of the long chain of iron or gold, of thorns or flowers, that would never have bound you, but for the formation of the first link on one memorable day.

References

Adler, Mortimer The Paideis Proposal, New York: Macmillan, 1982.
Apple, M. and Beane, J., Democratic Schools, ASCD: Alexandria, Virginia, 1995.
Kniker, Charles, You and Values Education, Merrill, Columbus, Ohio, 1977.
Patterson, Jerry, Leadership for Tomorrow's. schools, ASCD, Alexandria, Virginia, 1993.
Phi Delta Kappa Needs Assessment Tools, Phi Delta Kappa, Bloomington, Indiana.
"UNIT receives $2 million giant", Campus News Network, University of Northern Iowa,
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FOSTERING PARTNERSHIPS IN SCHOOL REFORM

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INTRODUCTION

Education might helpfully be described as a conversation from generation to generation about matters of significance. It makes people more suited for life, and it brings people to a sense of living in a virtuous society. It is not free of values

Education is centrally concerned with values, and with truth, justice and love. Teachers are involved in the ministry of hope in the service of the young. In a very real sense education is a gift given to us by future generations.

I mention these matters here, largely because I believe that it is essential to have a clear vision of the purposes of education before we can adequately deal with the ways in which we foster partnerships in the service of education. In general it is worth noting that if there is to be a conversation from generation to generation then there are different groups involved. It is these groups which form the partnerships

The essence of all partnerships will be in the application of the broad principles of:

- **complimentarity of purposes**
- **effective communication among the partners**
- **trust among the partners.**

In reforming schools there ought to be a shared understanding of these principles and how they are translated into action in different settings. In each country and in each education system these principles will have a different meaning, and will take on different forms.

Partnerships Between Schools And Universities

The partnerships between schools and universities are fostered in a number of ways. These include:

1. **The professional education of teachers - both initial teacher education, and in-service education and formation**

In different countries there are different approaches to the professional education of teachers. As there is a widespread acceptance in many parts of the world of teaching now being considered to be an "all-graduate profession", there is a central role for universities in relation to professional education and to the continuing professional development of teachers. The professional education of teachers is based on a sound academic education, builds on this in professional development, and must continue all through the teacher's career It is not enough to have an effective initial education, because technology, ideas, and the ways in which we communicate all change so rapidly in the modern world.

This leads to the need for the establishment of confident partnerships of teacher education institutions with schools at Primary and Secondary levels. The nature of these partnerships can vary considerably, but they are likely to be characterized by the three principles of complimentarity, communication and trust

2. The continuity in curriculum patterns for Learners

One of the ways in which partnerships will flourish is in the progression and coherence of curriculum between school education and higher education, so far as the learner is concerned Consideration needs to be given to curriculum progression, coherence, relevance, and balance The relationships among the school, teacher education institution and university need careful consideration, not only when focussing on "academic courses" but also on "vocational education", which might include programmes such as medical studies, engineering, and teacher education There may indeed be value in looking at the "Core Skills" of school education to come to some understanding of what progression and coherence might look like throughout the academic and professional education of the teacher. There is certainly an almost universal trend to look at the "competences" promoted in the educational system, and in teacher education we need to be in a position to identity the "Core Skills" of our students, and how these are fostered and cherished by the continuity and progression of the learning processes in our education system.

3. The concern for "manpower planning" and the role of Government

In considering school reform the issue of targeting resources to enable reform is of central importance Often government is in a position to enable reform through "manpower planning".

The different policies across the world in relation to higher education, however, can make it difficult to generalise on such matters. Yet it is important to acknowledge that there is a close relationship between the aspirations for school reform by government and society and the resource allocations to schools and to universities. In government policy, there is a close and a subtle balance between resource allocation to different sectors of education which can enable or impede school reform. It must not be forgotten that resources are also available from the private sector to facilitate developments in school reforms, although in certain countries this can be even more difficult to predict and plan. Planning reforms are essential and in a number of European countries these are financially driven. The initiatives being developed through government, private initiatives, and corporate companies are all of significance.

4. The economic advantages in higher education from society's point of view

The links between schools and universities should also be considered from an economic point of view. The constant questioning about whether investing in university education and in teacher education increases the Gross National Product of a country, or whether investment is better targeted in school education, may only be able to be properly answered with reference to the stage of development of a particular country. There are clearly certain advantages of investment in higher education although the relative advantage for a particular country is a complex matter. School reforms are not constant in kind or in significance, and much depends on the educational aspirations of the country, and its stage of economic maturity and health.

It might also be noted that the distinctions among secondary education, further education, and higher education are becoming increasingly blurred in some countries. Perhaps this is the ultimate in partnership when there is no longer any real distinction. Yet it is not always helpful to move to such a position! since the distinctiveness of aspects of education has a number of advantages.

In all of this it is the recognition of the complimentarity of purpose of teacher education and schools, and the trust between them which lie at the heart of partnerships in school reform There can be little doubt that it is the way in which they share values; share understanding, and acknowledge the strengths of each partner which leads to a closeness of partnership and support for educational reform.

Educational reform must depend on the community of interest, that community of scholars, empowering each other within a framework of educational values. Mere compliance management which has no strategic significance, and which is not given credence by the partners is doomed not to succeed. Educational reform has to be built on sound principles.

Professional development and the school

School reforms require teacher reforms, Teachers are the essential power for change in education.

The quality of education in schools is largely determined by the quality of the teachers in them, In the development of programmes of school reform a great deal of confidence and trust has to be placed in the abilities of teachers and in their professionalism as educators.,

Teachers are part of the real world and are not immune from it, They are subject to the same pressures which affect society more generally, and while there can be high expectations of them, there ought not to be unreasonable expectations, or expectations that they can counter the forces of a world of changing values, Teachers cannot give what they do not have. They need support from the community of which they are part. Equally teachers have got to be aware of the reality of the lives of the students whom they teach. They must not teach the students that they wish they had, but teach the students that they have. In developing strategies for staff development there should be a concern not only for the *'technical'* competence of the teacher but also for the *'inner-self'* of the teacher herself or himself. Teachers need to be able to work with a view of the student as a unique individual. This means that the teacher should be able in a world of pressure to see that the student can:

- achieve whatever she or he wishes
- escape the mind-made manacles of educational endeavour
- develop young people and make them more suited for life.

Of course the teacher is not just concerned with any form of random development of the student. The teacher must be prepared to serve; prepared to help one's neighbour, and live a life of principle, and of goodness. Educational reforms must be based on sound educational, social, and moral principles.

The focus on staff development is therefore not one which is narrowly confined to development of skills and technical competences but which has a rather wider focus. In this regard it is certainly worth noting that a successful staff development programme will probably be focused on the school as a community. This develops a feeling of community amongst staff, allows the school to pace its work, and allows a way of working which takes account of local and individual needs.

School reforms must also foster partnerships internally within the school, and school reform should be built into school development planning. It is not difficult to see that there are aspects of reforms which operate within schools and, indeed, with individual teachers. What we should seek is a system which is layered, with one layer being the overall expectations of the reform, the second being the school, and the third being the individual teacher It may also be useful to highlight here a distinction between **corporate staff development,** meaning the development of an entire staff; and **Individual professional development,** which refers to the development of the individual teacher. Both are necessary, and in the ways in which staff development will take place, both will be implied by the reform programme itself. In the past, generally speaking, more attention has been paid to individual personal and professional development than with the development of staff as a whole.

Experience suggests that in the evolution and development of educational reforms there is a great deal to be said for the development of staff as a community. In this model it is expected that staff will be able to help each other in the growth of the community of the school. This is likely to have an important impact on the ethos of the school and on aspects of the hidden curriculum, which in turn will have an important impact on the values of the school. At the heart of staff development planning will be the school development plan, and it may be worth emphasising that in preparing a school development plan there ought to be a concern for all aspects of the school.

STAFF DEVELOPMENT
The Organisational Principles

National	Curriculum Principles, Guidelines and Plans	INSET Provision Identify Needs	National /EA Discussion Seminar	Staff Development and Support
School	Staff Development	Staff Development	School Support	School Development Plan
Teacher	Teacher Development	Personal Action Plan	Reflection	Staff Appraisal and Interview

Developed from D Hargreaves

School Reform And The Organisation Of Public Schools

An aspect of school reform which can easily remain devoid of consideration is that of school organisation. The three elements of curriculum development, staff development, and institutional development are of paramount importance in the evolution of a school reform. Research suggests that there are three main conditions for successful school reforms These are:

- a clear rationale for the reform
- time for staff to discuss with one another aspects of the reform
- the availability of materials to support the reform.

Some attention has to be given as to how schools can support reforms by reflecting on their structures Schools generally are places in which there is careful change. There is an argument for suggesting that schools ought to be places which are leaders in change. There are those who would be quick to criticise schools because of their inability to change, while others will be quick to demonstrate that they are able to jump on band wagons with an alacrity that is bewildering.

Schools have to be careful that they are stable while not stagnating, and flexible while not fragile as organisations. There is a great deal to be said for school reforms to develop organisational systems where there is internal cohesion and effective external communication. This requires attention to internal and external forms of partnerships to create a confident community of professional scholars.

Centres Of Educational Development And Public Schools

Educational reforms which are sustainable are set firmly as a part of the society in which the school is set It is not practical to set a reform as a kind of "transplant" in an education system.

The role of the State is to have a concern for its people. It is the responsibility of government to create laws to spend public funds to raise taxes to develop national educational systems for the economic prosperity and personal development of the people. In many countries current and recent developments in education have shown more interest in outcomes, targets, and the economy, than the moral and ethical values of our society. In this regard we have to be aware of the values, expectations and aspirations of the partners in our educational endeavours.

It seems essential to recognise that it is not the role of education to be an agent only for transmitting 'culture'. That would be a very limited model of the nature of education itself, and of the work undertaken in schools. Indeed, it would be an inadequate conceptualisation of education since it is more concerned with the ways in which culture changes and develops as it is passed from one generation to the next. Education is not concerned with *'production'*, but with *'reproduction'* . This is altogether a more dynamic and participatory idea of a process of becoming *'educated'* as we encounter people and ideas, and in doing so, grow in our understanding and spirit. Education is not primarily about *'products'* but about the creation of something new when two previously separate entities come together, for example, two sets of ideas come together to form a new idea Ultimately, education is not exclusively an intellectual pursuit, but rather one of the growth and the nourishment of *'the inner self'* It is this concern with the inner self that must be at the heart of what we do in our schools. That is what makes them distinctive and that makes them so valuable in a world which is quick to put pressure on young people with the ideals and values of the market place. There are places to be other than the market place and one of these is in the school. To be in the school is to be in an environment which values knowledge, understanding, hope and care. These are not the values of the market place. One does not find in the market place that the aspects of life that are particularly valued are truth, honesty, care, and concern for one's neighbour. The market place is concerned with profit, with success, and with being better than other people. That is not the hallmark of the school.

So school reforms have to be undertaken with care, a care which reinforces the value system of the society in which the school is located. In this way the centre for educational development should:

- have technical competence and effectiveness
- have an understanding of the ways in which schools transform themselves
- have a clear understanding of the value systems which motivate and permeate the schools .
- empower the school in its development as a community in transformation.

At best there is much to be said for developing a strategic alliance between the school and centres for educational development. This alliance should build on the essential qualities of the school, and support the kind of reforms which are in the overall interest of the schools. This is particularly true where there is an attempt at transformational strategic change, as the nature of school reform is such that it will be sustained by the community of teachers, leavers, parents and other professionals.

CONCLUSION

In all the developments requiring partnerships in education the essential issues continue to be complimentarity, communication and trust Without those education will be a bureaucratic exercise reduced to a set of arrangements, or even legal requirements. There is a very strong case to be made to consider that education should be as free of legal requirements as possible, since it is the dynamic interplay of a conversation which inspires effective educational development. To limit this by a legal framework can be restrictive and impeding of change and appropriate growth and empowerment. Compliance planning is not sustainable in promoting effective school reform.

Schools must recognise the prevailing value system of the society in which the school is set, but need not take on all the values of that society. Education may act as a beacon for society rather than as a mirror of it. Those who are engaged in education should be clear about the purposes of educational reforms, and should reflect these in the partnerships which are so necessary in an effective education which inspires us to work for a more virtuous society - since that is what is at the heart of school reform.

POSITIVE TENSIONS: KEYS TO EDUCATIONAL RENEWAL IN A SCHOOL-UNIVERSITY PARTNERSHIP

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Partnership

A review of recent history and of contemporary conditions in American education could cause more cynical observers to conclude that the educational establishment has lost the confidence of the American public. Many educational leaders feel besieged by the constant barrage of criticism pointed at the schools of the nation. Beset with problems resulting from a society struggling to deal with changing moral and family values, growing cultural and linguistic diversity, mounting disparity between rich and poor and shifting expectations as to which institutions bear responsibility for corrective action, public school officials struggle to make schooling a positive and beneficial experience for those who teach and learn in this setting. Although the report, A Nation at *Risk is* now thirteen years old, it's strident, critical commentary on American education has left a malingering doubt in the minds of many that our schools are not meeting an acceptable standard Its claim that "the educational foundations of our society are presently being eroded by a rising tide of mediocrity that threatens our very future as a nation and a period" (p 5) continues to characterize the way many think and speak about our educational system.

Much has been written and attempted in the years since A *Nation at Risk was* published. Federal and state governments have set goals, framed new initiatives and encouraged higher achievement in so-called core areas of learning. Examinations have been introduced to monitor student achievement at several stages of pupil development. At the same time other organizations: universities, corporations, foundations and professional societies have attempted to create new units, propose solutions and advocate change, all in the interest of stemming the tide of criticism and of regaining the public's trust in schooling. Within the past few months a new series of reports dealing with education and teacher education have surfaced which reflect in their recommendations recognition of and support for many of the emergent developments of the past ten to twelve years. Among these recommendations is one which is central to our paper and common to the way several sites across the United States have united in an effort to reaffirm the importance and quality of teacher education and schooling in America.

School-University Partnerships

In the recently published report *What Matters Most Teaching for America's Future*, the result of a joint venture supported and led by The National Commission on Teaching and America's Future, the authors voice their support for "standards to upgrade both student and teacher performance" (p. 64) and the need to "reinvent teacher preparation and professional development" (p. 64). included among the recommendations is a statement favoring the development and use of partnerships between schools and universities to address the problems at hand. Why partnerships? Why partnerships involving schools and universities? The recommendation is not without foundation. It is not an idle dream conceived in a vacuum as a desperate attempt to find a remedy to a seeming overwhelming problem. Instead its existence as a serious proposal in the midst of a number of other options, results from over a decade of experimentation, development and growth which has spread across the nation and which has led to widespread acceptance of the foundational conviction that if reform of education is to occur in the order and magnitude required, it can only occur if those in the educational establishment work together rather than apart and in harmony rather than in conflict and opposition to one another.

For those unfamiliar with the nature of the task it is important to note that the task of bringing schools and universities together in a collaborative partnership is not an easy task. One observer in examining the prospect of linking universities and schools, compares the task of bringing them together in the cause of renewing education to the challenge of bringing dinosaurs together to dance a ballot. Schlecty (cited in DeBevoise, 1986) notes and develops the analogy: "Without persistence, a clear perception of how these dinosaurs move, and personal relationships that help expedite bureaucratic procedures, potential collaborators could give up in despair" (p 12) Through Schlecty's image of choreographing a ballet with dinosaurs, we are invited to query whether or not schools and universities are too large, too different, too old, or too set in their ways to be able, together, to create a dance of beauty, expression and rhythmic harmony Yet the analogy ends on an optimistic note: "The good news is that with mutual understanding and trust, even dinosaurs can dance" (p.12).

The positive experiences of partnerships nationwide and of the BYU Public School Partnership in particular are convincing us that schools and universities can dance together-- and often dance together very well We believe that the experiences of the BYU-Public School Partnership substantiate faith in the value of, even the need for, creating such cross-institutional connections. In addition to providing affirmation for such action, our experiences inform the task of building and sustaining these unnatural connections and, as well, they illustrate the generative capacity of partnerships.

Although we continue to grow and learn about the effective operation of a partnership we believe we have identified several elements for their success which require attention and continual consideration if a partnership is to survive and succeed. The formation, operation and refinement of partnerships in educational reform is a new arena of investigation and study They stress the process of working together with a common set of beliefs and values They require more than advocacy We must learn of their nature, their struggles, the foundations of their successes and failures and their essential ingredients. Our paper and presentation is an attempt to navigate and chart these largely unexplored waters We invite you to join with us in the venture.

The BYU-Public School Partnership

First, let us provide a brief historical and contextual description so you may understand the setting. The BYU-Public School Partnership was formed in April 1984 by five Utah school districts and Brigham Young University. These districts provide K-12 schooling for approximately one-third of Utah's total school populations, reflecting a mixture of urban, suburban and rural schools. These districts are contiguous and adjoin the university which is located in Provo BYU is a private university, funded, operated and governed by the Church of Jesus Christ *of* Latter-day Saints. With a full-time enrollment of approximately 27,500 students it is the largest religion sponsored private university in the nation. It has the largest teacher education program in the state of Utah. With over 5,000 declared teacher education majors and approximately 1000 graduates in early childhood, elementary and secondary education a year, it ranks as one of the 20 largest teacher education programs in the United States. The BYU-Public School Partnership was created partly as a response to the criticisms directed at public schooling in the report, A Nation at Risk. It also addressed some shortcomings in teacher education in the university. Dr. John I Goodlad was invited to assist in the process of bringing school and university leaders together to explore the desirability and feasibility of forming partnership to address the needs of both entities. The outcome of their discussion was the creation of BYU-Public school. The involvement of Dr. Goodlad in this initial planning enterprise has been of major importance to the longevity, growth and effectiveness of this improvement of teacher education and schooling in the USA during the past fifteen years. He has studied thoroughly the needs of universities and colleges in making better provisions for teacher education. He has written extensively on the subject and has framed a reform agenda being vigorously pursued by 16 school-university partnership sites across America. The BYU- Public School Partnership is one of the 16 member sites belonging to the National Network for Educational Renewal and therefore is the benefactor of the continuing interest and support of Dr. Goodlad and his colleagues who operate the Center for Educational Renewal and the Institute for Educational Inquiry, both of which are organizational and idea centers feeding a common reform movement of these 16 member sites. Central to the work of these reformers is the belief the improvement of teacher education and the renewal of schooling are integrally related and they need to be pursued simultaneously. As Good has overved,

> *For schools to get better, they must have better teachers, among other things, To prepare better teachers (and counselors, special educators, and Administrators) universities must have access to school settings exhibiting the very best practices. To assure the best practices, schools must have ongoing access to alternative ideas and knowledge. For universities to have access to exemplary settings and for these settings to become and remain exemplary, the schools and the preparing institutions must develop symbiotic relationships through joining together* as *equal partners. In the kind of partnership envisioned, universities have a stake in and responsibility for school improvement just as the schools have an interest in and responsibility for the education of those who will staff the schools (1987 pp. 19-20).*

Typically across the nation most efforts to make provision for better teachers and better schools have proceeded unilaterally with only limited effort and success in framing an organizational entity to cause and help schools and universities to work together The BYU-Public School Partnership is an attempt to ensure that the key players will work together in a collaborative mode. The following illustrations may help to clarify both the challenges we face and the ways we have attempted to address them There are three entities which we believe are central to the preparation of teachers and the improvement of schooling: the public schools, the David 0 McKay School of Education within Brigham Young University and the other colleges and departments of the University which provide instruction in general liberal education and subject area specializations such as chemistry, mathematics, English, music, history, art, physical education or languages As Figure 1 illustrates, each of these partners acts like a negative electron charge repelling the other two. Although they share common purposes they tend to act independently and often critically of one another For much of its twelve yea history the BYU-Public School Partnership has built a union primarily between th public schools and the David 0. McKay School of Education through the creation an operation of partner schools.

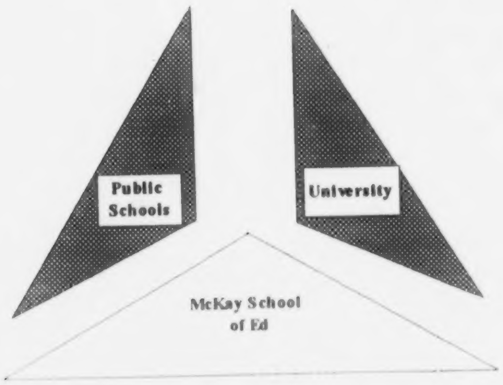


Figure 1: A Difficult Union

Partner Schools

These partner schools are sites where the teacher education students preparing to be elementary school teachers receive much of their professional education instruction and where teachers and administrators in the school play an Important role in helping to ensure that the university students are taught in a setting where the ideas being taught by university personnel in the David 0 McKay School of Education are in harmony or congruent with practices in the school. The distances often existing between school and university personnel have been overcome in this partnership. Personnel in the two settings. school and university (at least the School of Education part) have been finding and developing ways of collaborating to provide for better teacher education and better schools.

This connecting or sharing or more appropriately, this coming closer together, (see Figure 2) has been made possible by the formation and operation of a three-tier organization which constitutes the BYU-Public School Partnership. Since the inception of the Partnership it has operated under the authority of a Governing 80a rd consisting of the five superintendents of education representing the five member school districts and the Dean of the David 0. McKay School of Education. Meeting almost monthly this Board authorizes, oversees and facilitates the various initiatives and programs Undertaken in the Partnership. A coordinating Council consisting of associate superintendents or directors of curriculum, associate deans of the School of Education and other representatives of both organizations also meet monthly to develop plans, to consider evaluative data on on-going projects or programs, to introduce new issues to be discussed and addressed and to ensure coordination of personnel and operations in the school districts and the university's school of education.

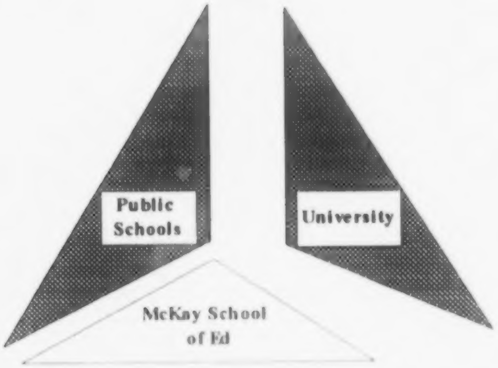


Figure 2: Rapprochement

The third tier of organization is at the level of the partner school where a designated school facilitator works to balance and harmonize the program and instructional needs of the teacher education personnel, students and faculty, with the effective operation of the school. Because the demands on these partner schools has been heavy and judged to be excessive due to the presence of twenty-five teacher education students and their professors, the idea of a partner school has been altered so that now 3-4 schools are connected as a single cluster site, thereby dividing both the burdens and advantages of these special purpose schools. The activities within these partner schools are instrumental in building a community of learners in the school where university students learn and test their skills and knowledge, university faculty continually renew themselves, teachers and administrators further their professional growth and students in the school benefit from the availability of many more instructors and the effects of a stimulating professional environment for their teachers. Truly these partner school settings are critical units to the success of the BYU-Public School Partnership.

The organization features just described has served the Partnership well for its first 12 years of operation This has occurred mainly because the Partnership up until the past year or two has focused primarily on the programs and concerns within the purview of the School of Education. Secondary teacher preparation at BYU is distributed among the colleges and disciplines of the university where the subject specializations of the teacher education candidates reside This means that 8 other colleges and at least 30 departments provide degrees to students aspiring to teach in secondary schools. While all of these programs require a common core of content offered uniquely in the School of Education, the tendency in most of the secondary programs is for students to be socialized mainly within the academic department of their teaching major. Thus there has been, at best, an uneasy alliance and, in most cases, a negative, critical relationship between the School of Education and the rest of the university.

Center for the Improvement of Teacher Education and Schooling.

As the BYU-Public School Partnership has recognized the formidable challenge and need to connect the rest of the university in purpose, association and practice to its secondary schools and to the School of Education, it has been recognized that the existing organizational structures *of* the Partnership is inadequate for the task Hence, we are in the midst of reconceiving the structure and have introduced a new entity called the Center for the Improvement of Teacher Education and Schooling (CITES) This Center is intended to act as a strong, positive change ion drawing the three separate entities both closer to the middle and to one another (see Figure 3).

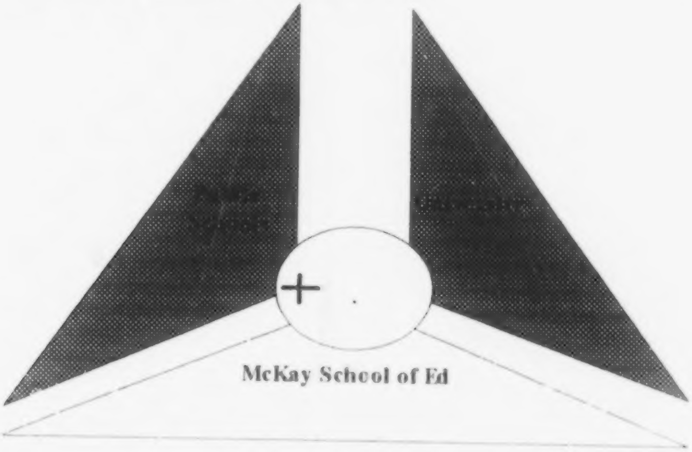
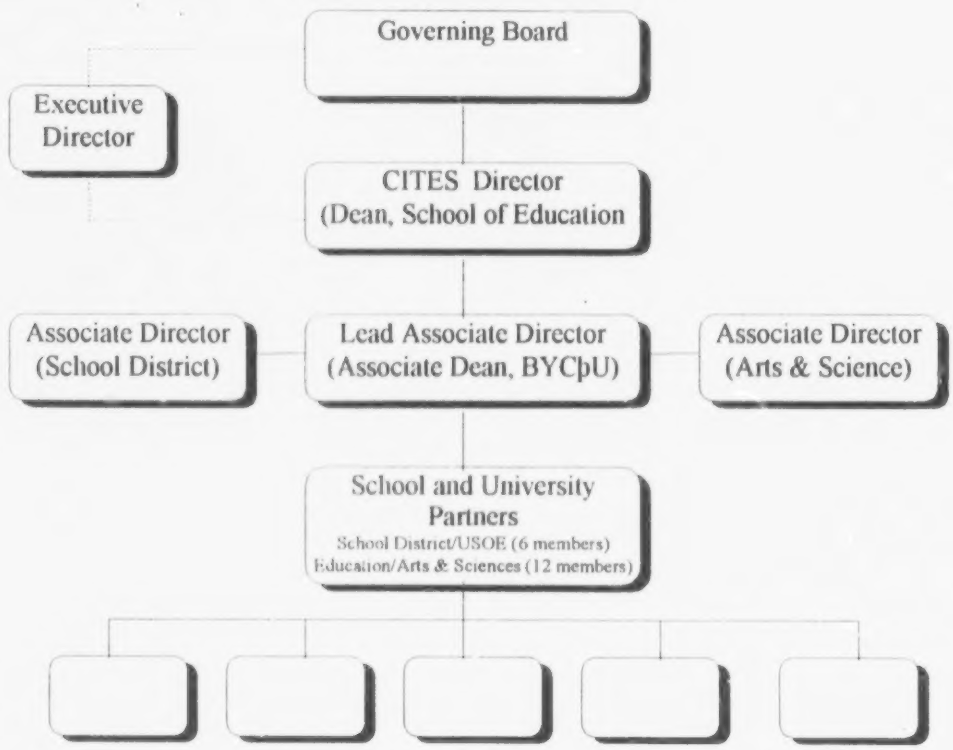


Figure 3: CITES

We believe there will and should always remain a small distance between the three partners indicating the constant challenge of keeping in balance the countervailing forces at work trying to overcome the factors forcing the entities apart. The Center has a governing board consisting of the original six members but now including the State Superintendent of Education and the Associate Academic Vice President of the university responsible for undergraduate education Within the Center a committee, broadly representative of the three organizational groups and the State Department of Education will act in place of the former coordinating council and, additionally, will serve as a review committee dealing with curricular and program changes in teacher education (see Figure 4). Thus two organizational constructs, the partner schools and the Center will serve to draw together and keep in harmony the interests of the school districts, the State Department of Education and the University, including the School of Education and the departments of the Arts and Sciences.

The Center will have several major responsibilities, none of which is intended to take authority or responsibility away from its constituent members Of primary importance is the Center's obligation to ensure that in matters of simultaneously renewing schools and improving teacher education the various partners share in the discussion, planning, implementing and evaluation of various initiatives and that they do so as equals and co-owners. It will also fall to the Center to sustain commitment to a common moral agenda and to argue for a sufficient resource base to meet the needs of better teacher education and school improvement The Center will sponsor and coordinate several ventures as part of its mandate dealing with curriculum and professional development, both in relation to teacher education and the K-12 core curriculum. It will also be an idea center where interested personnel will gather to explore topics of concern that relate to teaching and learning.

Partnership Council for CITES


Governing Board
Executive Director
CITES Director (Dean, School of Education
Associate Director (School District)
Lead Associate Director (Associate Dean, BYCþU)
Associate Director (Arts & Science)
School and University Partners
School District/USOE (6 members)
Education/Arts & Sciences (12 members)

Critical to the success of the Center and the Partnership it serves and in builds is the development and maintenance of a trust relationship among individuals across the various member organizations. The task is demanding and endless, not something to be achieved and then to be forgotten. Instead it must be constantly nurtured and built Personnel as well, need to change. Provision must be made to educate and re-educate at all levels of the organization. Hence, another important function of the Center will be to engage school, state and university personnel in the task of learning about partnership, a common moral agenda, effective partnering strategies and conditions, change initiatives and the place of individuals and groups within the broader agenda of reform. Partnering is a very demanding, time consuming endeavor. It requires extended association and conversation, both to initiate, sustain and refine joint ventures, but, also, to keep people informed and knowledgeable so that the generative capacity of the organization is increased and also so that personnel at all levels may understand and contribute constructively to the purposes of the partnership.

There are several conditions which must exist within partnerships in order to heighten the likelihood or to ensure their success For example, Schlecty and Whitford (1988) claim that an organic relationship needs to emerge, resulting in a common vision arising from the pursuit of shared problems. In somewhat the same spirit, Goodlad (1994) borrowing a concept from the biological sciences, observes that effective partnerships create a symbiotic relationship, one in which the participants benefit each other because their needs and interests are complementary and mutually interdependent.

Symbiotic Partnerships

Whatever the level or degree of bonding which occurs within a partnership, Goodlad (1994) maintains there are at least four distinct conditions which are requisite for the creation of a successful partnership:

1. Distinctive differences among the courting parties.
2. The complementarily of these differences--that is, the degree to which each side contributes to the other's lack.
3. The degree to which the courting parties first envision and then comprehend through experience the extent to which this complementarily depends on commitment and effort fully shared
4. Powerful contextual contingencies.

For the first condition, dissimilarity among the partners, to exist beneficially, the specific domain of each partner must be recognized, respected and preserved. Some roles and responsibilities can be shared, but some by their nature must be distinctive and reserved to an individual member organization (Intriligator, 1982). Not only must members provide uniqueness and dissimilarity, they must preserve and value these distinctions in one another. As partners work together, they must be careful not to blend to the point that their contributions become indistinct. For example, as university professors spend time in the schools they must guard against the tendency to become identical in role and perspective to their classroom colleagues; they must be careful to preserve the distinctiveness of the contributions which can and should emanate from the university. Similarly, as public school personnel participate in research and other university-like involvements, they must be sure that such participation does not detract from the focus and expertise associated with their school based role.

Goodlad's second condition specifies that the respective parties in the partnership must be capable of providing services, resources and perspectives which meet the need of the other partners and which another partner would have difficulty in providing for itself Hannay and Stevens (1984) have designated three conditions which contributed to their own successful collaboration: (1) partners were involved in ways that were active and equal, neither partner being dominant; (2) each acknowledged the other's perspective and appreciated the other's role; and (3) both were amenable to giving time and capable of sacrificing a degree of ego involvement (p. 23). The need for such relationships is reinforced by Clark's (1986) observation that there "have been few instances of universities or schools or school districts collaborating as *equal* partners on problems representing the substantial overlapping of self-interests" (p.ii). Haberman (1971), in discussing relationships between schools and universities, observes that "both groups are experts in maintaining their own organization and espousing radical reforms in the other" (p. 134) When a partnership is satisfying to its members, mistrust and egocentrism are less likely to occur.

The third condition stipulated by Goodlad requires that the partners in the relationship be fully committed to and engaged in the anticipated outcomes of the organization. If one of the partners is lackadaisical or indifferent, the other(s) cannot adequately or appropriately compensate. Eventually, as trust increases among the partners, they become more willing to sacrifice for the common good. Thus by building and furthering the interests of their partners and their shared purposes, they find that their own needs are more effectively and readily met. Thus they become more fully engaged in the shared venture.

Goodlad's fourth and final condition recognizes that the demands of creating a new organization must be offset by the availability or prospects of extra resources or elevated status, or by the sense of being in fashion. But as important as these extrinsic rewards may be in encouraging and sustaining commitment to a partnership, they are not an adequate substitute for the feelings of personal and institutional satisfaction stemming from the relationships, interactions and resultant accomplishments available within the new organization.

Creating, developing and sustaining partnerships is not an easy assignment. Effective partnerships require patience, sacrifice and hard work partnerships involve risk as well as effort Comer (1980) warns that obstacles to effective partnerships may be as simple as breakdowns in communication between entities or individuals or as complex as an individual or organization's need for autonomy or for self-direction As Goodlad (1990) affirms, "This kind of joining is not easy. Indeed, it is so difficult that, at times, the dynamics of creating a collaborative process often obfuscate the nature of the problems being addressed: (p. xiv).

Participants within a partnership organization must be especially mindful of this cautionary note. It is possible that, in the efforts required to establish a relationship of trust, sharing and cooperation, the participants may come to mistake processes of achieving richer, more meaningful personal and professional relationships or building a new set of structures and in`. involvements for the more important goals which are the purpose for which the organization exists Granted, the organization must be characterized by positive relationships and by a willingness of the members to work together. Such outcomes, however, are not sufficient. They are but one requisite for the achievement of renewal and improvement in schooling and, ultimately, for the enhancement of student learning. In their supportive but cautionary analysis of the partnership function, Sarason, Carroll, Maton, Cohen and Lorentz (1977) voice the dilemma: "Between values and action is a field of mines that far more often than not absorbs one in the pressures and ambiguities of action at the expense of appropriate concern for the values initially giving rise to actions" (p. 7).

Creative Work

Once a school-university partnership has defined itself as an organization and has begun to develop trust among its members, change initiatives are designed which are intended to improve pedagogical practice and enhance student learning These initiatives constitute the creative heart of the partnership, the place where new educational ideas are conceived, refined, and implemented. Such creative work can focus on one or more of the four primary goal areas of the partner schools: educator preparation, professional development, curriculum development, or research and inquiry (see Osguthorpe, Harris, Harris, & Black, 1996). In the paper we will group such creative work into two categories: partner school praxis and center of pedagogy experimentation.

Partner school praxis. Partner schools provide a place for changing pedagogy and improving student learning, a place where theory and practice can literally come together as university faculty and school educators unite to teach children and youth while simultaneously preparing the next generation of teachers This gradual coming together of theory and practice might be called "partner school praxis." Such praxis might be seen as an underlying goal of all partnership work: the mutual enrichment of pedagogical theory and classroom practice in ways that each draws upon and nourishes the other.

Signs of such praxis are emerging in BYU's redesigned elementary and special education teacher preparation programs. Mentor teachers are becoming more involved in the conversations that focus on the rationale (the theoretical foundations) for the program, and university faculty are participating more frequently in the actual teaching practices that occur in mentor teachers' classrooms. These modifications in professional roles are changing the ethos of partner schools in ways that participants and visitors alike can discern And as such changes become more apparent, they are among the most valued accomplishments of partnership work.

Center of pedagogy experimentation. In September, 1996 approval was obtained to create the Center for the Improvement of Teacher Education and Schooling in the BYU-Public School Partnership. Patterned after the concept of a center of pedagogy developed by John Goodlad (1994), the Center brought together educators from the schools, teacher educators, and arts and sciences faculty committed to the simultaneous renewal of educator preparation and K-12 schooling. One of the first initiatives launched by the Center has been the "Associates Program" in which a total of 25 women and men from the five Partnership school districts, the Utah State Office of Education, and BYU met on nine different occasions for a total of 15 days to discuss a variety of professional articles and seven books related to teacher education and school
renewal al As a result of the meetings, each participant developed strategies for improving teaching and learning in their various sites.

The type of experimentation on learning and teaching that has emerged from the Associates Program has been bolstered by the efforts of a school-based inquiry consultant" working in the Partnership. This consultant has assisted selected partner schools to launch inquiry groups in which school and university faculty meet regularly to pursue questions that are intended to lead to improved educational practice. One of these inquiry groups is currently exploring the redesign of a master's program for experienced teachers. Thus in cooperation with partner schools the Center is fostering the kind of conversation that is changing the ways educators, university students, and children and youth learn--in partner schools, in associates programs, or in college classrooms.

Accomplishments

If a school-university partnership is to continue to pursue educational change, it must periodically recognize and celebrate its accomplishments. Without such activity, a partnership will eventually disintegrate as an organizational entity In the case of the BYU-Public School Partnership, one might point to a variety of clearly identifiable accomplishments, changes in teacher preparation, professional development, curriculum development, and the use of research and inquiry. We will describe four examples of such accomplishments: the revision of the special education teacher preparation program, the redesign of the elementary education program, a project to improve the teaching of science funded by the National Science Foundation, and BYU's multicultural and international student teacher program.

Special education program revision. In 1992 BYU's special education faculty, joined by special education teachers in partner schools, began discussing the future of their teacher preparation program. The Associate Superintendent of Provo School District acted as the discussion leader for each of the sessions. To meet the changing needs of children with disabilities the group developed a proposal in 1993 to discontinue the undergraduate major in special education and replace it with a post-baccalaureate program.

The proposal was reviewed by the School of Education, the Partnership's Governing Board, and the Coordinating Council prior to being submitted to university administration and the Board of Trustees for their appraisal In giving its approval for the proposed shift to a graduate emphasis in special education, university administrators expressed their intention to use the proposal as a prototype for other colleges to follow in developing program revision initiatives.

Elementary education program revision. Approximately 500 students are recommended by BYU for certification in elementary education each year In response to comments from cooperating teachers in partner schools and from university administrators, the Department of Elementary Education began discussing in 1993 the need to reformulate their undergraduate major. To achieve a thorough revision of program requirements and offerings, the Department Chair requested that all elementary education faculty be released from their regular contractual duties for the entire spring term (two months) in 1994 and that appropriate faculty in the arts and sciences departments and in the public schools also be released from their duties so that they might all participate in collaborative planning sessions. Superintendents, principals, deans, and department chairs each committed resources that would permit their faculty to participate in the two-month planning sessions. As participants came together in these sessions to reflect upon the current teacher preparation program and to consider innovations and alternatives for the future, a sustained conversation developed around the most critical issues related to teacher education. As the conversation evolved, relationships developed among faculty in arts and sciences and faculty in education that permitted the free exchange of ideas and eventually led to the tough decisions that were required for a complete revision of the elementary education curriculum.

The first student cohorts entered the redesigned program in the fall of 1994, a program calling for prospective teachers to spend two full academic years in partner schools in which university and partner school faculty collaborate on courses that include daily practicum work in K-12 classrooms. During the 1994-95 school year, extensive evaluation was conducted to determine the effects of the pilot program, and these data are now being used to prepare a report on the first year of implementation. Preliminary results indicate that the program met most of its intended goals and should be expanded this coming year.

NSF project. While the special education and elementary education initiatives focused on broad-scale programmatic change in teacher preparation, an additional project aimed at improving teaching and learning in the sciences. Funded by the National Science Foundation in 1994, the project was designed as a pilot effort that could lead to a multi-year initiative in the systemic renewal of K-16 science education. Scientists, mathematicians, and teacher educators, along with science educators from the schools, all participated in the development of the initial proposal and in the subsequent design and implementation of a summer training institute, as well as a year-long trial of newly developed approaches to science education based on mentoring and service learning. Preliminary data from the evaluation indicate that the project has indeed strengthened the pre-service teachers' experience in their final practicum, the cooperating teachers' ability to design and implement service learning approaches in their classrooms, and all participants' motivation to continue the project in the future.

Not only has the NSF project yielded direct applications in school and university classrooms, it has led to additional reform initiatives in science and mathematics education For example, participants in the NSF project have submitted proposals to the Utah State Office of Education and the U.S. West Foundation, as well as follow-up proposals to NSF, for initiatives that build on the original project's notions of service learning, mentoring, and experiential approaches to science education. These proposals have included continuation of a wetlands service learning initiative begun in the summer institute, a project on electron microscopy, and teacher preparation initiatives in National Council for Teachers of Mathematics standards in mathematics education.

Multicultural and International Student Teaching Practica To provide prospective teachers with appropriate experience with multicultural and international students, the Partnership has sponsored urban education programs in Salt Lake City and Washington, DC and has developed international education programs in Mexico, China, and Polynesia. In each of these programs students spend a semester in an urban or international school where, they complete their student teaching requirements under the supervision of a qualified mentor teacher During the past five years approximately 100 students have completed such practice in urban and international sites It is anticipated that approximately 50 BYU students will participate in urban and international education programs during the coming academic year.

Positive Tensions

Changes, such as those described, do not come easily in any partnership. The kind of collaborative effort required to institute new approaches to teaching and learning demands that schools and universities give up former ways of thanking and acting and replace them with more enlightened educational practice. In the process of this kind of educational renewal, tensions among participants inevitably develop, tensions that underlie what Fullan (1993) calls "a new paradigm of change." This paradigm underscores the power of each participant to initiate change, rather than relying exclusively upon designated leaders who, in the old paradigm, mandated change.

While the new paradigm can yield more lasting and meaningful improvements in educational practice, we believe that it brings a new set of tensions that must be acknowledged and moderated if a school-university partnership is to succeed in its mission to improve learning and teaching. While the tensions in the old paradigm were largely negative, centering around disputes over power and control ("Just because you're my boss, you can't tell me what to do"), the tensions in the new paradigm are primarily positive, focusing on fundamental definitions of who we are as human beings and how our humanness bears upon common goals ("We will work together to help these students, but we'll do it in a way that doesn't push any of us beyond our limits").

The type of change that a school-university partnership fosters is based upon authority but not the kind of authority in the old paradigm that came strictly from one's position or title. In describing the power of individuals to change their own teaching practice through reflection and action research, Tom Russell coined the term "authority of experience" (Russell & Korthagen, 1995) Rather than relying on a school principal, a university professor, or a district curriculum specialist to suggest improvements in a teacher's pedagogy, educators are encouraged to examine their own classroom practice, try new approaches, and, through their own experience with the new methods, improve their own teaching. In partnerships that seek systemic change in both school and university teaching, we suggest the extension of this notion as the "authority of *shared* experience." And we believe that it is in the sharing, the collaborative reflection, that positive tensions arise, tensions that are necessary *if* school-wide or university-wide pedagogical improvement is to occur.

Based upon our own shared experience in the BYU-Public School Partnership, we have identified eight positive tensions that we believe are central to the change process. While each tension may be viewed as distinct from another, we have grouped them into two main poles entitled, "Too Subjective" and "Too Objective" (see Table 1). These poles refer to fundamental human needs, the need to contribute something new, to be supportive of others, "let things go," and the need to adhere to the tradition of one's culture, to prove the worth of one's work, and to live by the rules by which institutions and citizens are governed. Although both of these tensions are necessary to the change process, there is danger in moving too far to either side--relying too much on unrestrained spontaneity or too much on controlled planning. To improve teaching and learning, a partnership must strike a balance between each of the positive tensions.

Table 1
Descriptions of Positive Tensions in School-University Partnerships

Tension	Too Subjective	Balanced	Too Objective
Membership	*Inclusive Membership:* *There* are no requirements for participation; any person or institution is welcome.	*Informed Membership* Participation is; based upon the interests, abilities, and needs of each partner.	*Exclusive Membership:* Participation is limited to those who meet strict requirements.
Roles	*Group Perspective:* Participants relinquish their traditional roles and lose their institutional identity.	*Role Flexibility:* Partners shift roles as needed while retaining institutional identity.	*Individual Identity:* Participants hold to their traditional roles and their institutional identity.
Commitment	*Altruism:* Participants work solely to meet their partner 's needs.	*Symbiosis:* Participants work to meet their partner 's and their Own needs simultaneously.	*Self-interest:* Participants work solely to meet their own needs.
Planning	*Spontaneous Renewal* Emphasis is placed on unplanned change.	*Nurtured Development:* Partners sustain both planned and unplanned initiatives of mutual benefit.	Planned Change: Emphasis is placed on goal-setting and strategic planning.
Approach to Change	*Champion:* Change initiatives of Limited worth succeed because some participants champion the Cause.	*Inquiring Change Agenty:* Participants support each other in thoughtful examination of each change initiative.	Critic: Worthy change initiatives fail because some participants offer excessive criticism.
Amount of Change	*Expansion:* New change initiatives are embraced without regard for partnership-wide impact.	*Disciplined Openness:* New change initiatives are considered in light of current work.	*Focus:* Current change initiatives drive partnership work and exclude new proposals from consideration.
Evaluation	*Process Evaluation:* Partners justify their work based solely on the quality of partnership relationships and activities.	*Collaborative Evaluation:* Partners jointly determine the value of their work through both symbolic evidence and measurable results.	*Outcome Evaluation:* Partners demand objective evidence to justify each partnership initiative.
Costs - Benefits	*Diversity:* Partners make varying contributions and receive different benefits without regard for equity.	*Parity:* Participants agree that contributions are yielding appropriate benefits.	*Uniformity:* Partners must contribute the same resources and receive the same benefits.

We might compare a partnership to a suspension bridge that has eight main anchor points representing the tensions, each with a steel tower (representing balance) with the steel cable on either side of each tower representing the two dimensions of the eight positive tensions When each of the cables is equally taut, the support poles remain vertical ("balanced") and the bridge stays upright and secure. But if any cable loses its tension through neglect, excessive stress, or environmental effects, the bridge loses its power to support those who wish to travel across it. And if multiple cables are top tight or too loose, the towers begin to tilt, losing their ability to suspend the main beam, and the bridge collapses. Using the metaphor of the bridge, Figure 5 illustrates the positive tensions of school-university partnerships. To explain how each of the tensions can affect collaborative work, we offer illustrative cases from our own experience in the BYU-Public School Partnership.

Membership. In partnership work the question arises continually of who should be counted as a member. On a national level, organizers must determine which school-university consortia should be included in national networks; on a local level, partnership governing boards must decide which schools should be considered as partner or professional development schools; and within a school or university all individuals must decide to what degree they are members of the partnership While criteria must guide membership decisions at the national and local levels and pull at least to some extent on the side of "exclusive membership," there must be room for new institutions to join or current institutions to discontinue their participation if the organization is to remain vital and alive. However, individuals within a member school or university should all be invited to participate fully in the partnership.

Figure (5) Positive Tensions

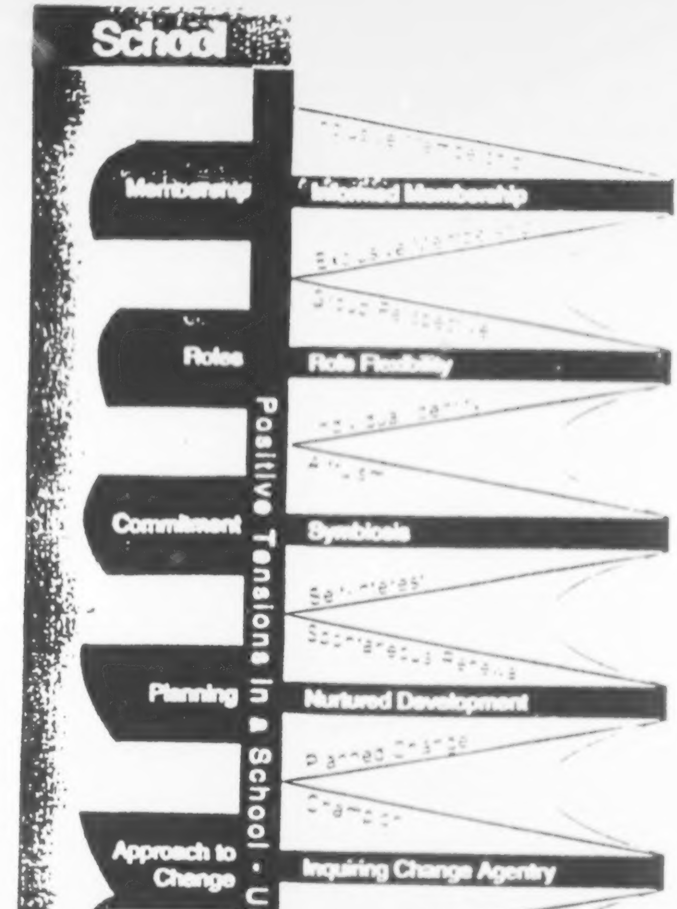

School
Membership
Informed Membership
Exclusive Membership
Group Perspective
Roles
Role Flexibility
Individual Identity
Altruism
Commitment
Symbiosis
Self-Interest
Spontaneous Renewal
Planning
Nurtured Development
Planned Change
Champion
Approach to Change
Inquiring Change Agentry
Expansion
Amount of Change
Disciplined Openness
Focus
Process Evaluation
Evaluation
Collaborative Evaluation
Outcome Evaluation
Diversity
Costs-Benefits
Parity
Uniformity
Positive Tensions in a School - University Partnership
University

Figure 5. Positive Tensions

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Even though institutions have exerted constant pressure to increase the size of the National Network for Educational Renewal (NNER), its organizers have intentionally limited its size to the current 18 partnership sites in the U.S. (Goodlad, 1996) Similarly, the governing board of the BYU-Public School Partnership has limited the number of schools designated as partner schools, and in the process has established criteria that must be met before such a designation is made. In some cases, faculty within a school that seeks to become a partner school have chosen to transfer to another school rather than participate as members in the newly conceived organization, underscoring the importance of inviting *all* members within the school to consider themselves as members of the partnership. Likewise, all those at the University are encouraged to consider themselves as members of the Partnership. Faculty in the McKay School of Education are admittedly more likely to feel part of the Partnership, but faculty in BYU's arts and sciences departments are gradually becoming involved in the organization.

Roles. As educators come to see themselves as members of a school university partnership, they begin to assume new professional roles. School educators may spend more of their time at the university, and university educators spend more of their time in the schools Such "cross-cultural" experience leads to a tension between acting on the host group's perspective as opposed to maintaining individual identity. School educators might feel at times as if they are expected to behave like university educators, while university educators may feel pressure to behave like school educators.

Following the first-year pilot study of BYU's newly revised elementary education cohort program, a meeting was held in a partner school to discuss the merit of the program Participating mentor teachers expressed concern that university faculty who had been teaching methods courses in the partner school had assigned university students to complete assignments in the mentor teacher's classrooms that did not fit with the teacher's curriculum University faculty likewise voiced concern that teachers' curriculum should be more closely aligned with the university course which represented the latest in pedagogical theory. Partner school teachers, as well as university faculty felt that they were losing their own identity, that school educators were expected to focus too much on theory and that university faculty were expected to focus too much on classroom practice.

The discussion led to a conversation on the importance of each institution and each participant retaining individual identity while developing a perspective of the group, a need for flexibility in roles without a complete merging of roles. In this way the school and university could each contribute uniquely to the new elementary education program without either partner expecting the other to reject the very differences in organizational culture that are essential to sustain partnership endeavors.

Commitment. For a partnership to endure, each partner must have a measure of altruism, contributing freely to the group's goals. But members must also feel that collaborative efforts lead to the accomplishment of each partner's unique needs, a relationship Goodlad (1990a) refers to as "symbiosis." If either partner's needs is not met by the collective effort, the partnership will eventually collapse, regardless of the degree of altruism that exists.

As the BYU-Public School Partnership was in its early stages of development, this tension was manifest in a variety of ways. For example, in a partnership conference a group of junior high school teachers expressed concern that their school seemed to be "giving much more than the university to the Partnership." Then in a subsequent session of the same conference, a group of university faculty countered the teachers' comment by saying that they felt that the university seemed to be giving more than the schools. Both partners were thinking more about their own needs than about the needs of the other: self-interest had overcome altruism.

Such experiences can be defining moments for a partnership, leading either to a stronger organization or to its eventual dissolution. In the case that surfaced at the partnership conference, partners discussed their opposing views until they understood the nature of each participant 's contribution, and in the process began to forge a symbiotic relationship.

Planning. If roles are to be defined, and commitment is to be developed, participants must actively work together to improve learning and teaching Such collaborative initiatives might emerge in the form of highly structured, carefully planned programs, as spur-of-the-moment creative ideas, or as a healthy mix of structure and creativity. The NSF project mentioned earlier is an example of finding a mid-point between spontaneity and structured planning. Before agreeing to pursue the request for proposals from NSF, the scientists and educators who collaborated on the project had never worked together as a team The group formed quite spontaneously, considered together a variety of foci for the project, and came to consensus regarding the goals to follow an inquiry-based, service learning model.

As the application was prepared, the tension shifted from spontaneity to careful planning, complying with each of the criteria included in the call for proposals. Once funding was awarded, the project became a mixture of structure and creativity with each team member assuming different roles along the way. Then, as the main goals of the pilot project were achieved and the funding had been expended, a variety of previously unpredictable spin-off initiatives ensued, such as the wetlands project described earlier. Reflecting on the project, most would agree that balance needed to be found between the desire of team members to spontaneously create and the need to carry out the project with some order and control. This type of "nurtured development" is necessary in any school-university partnership if change initiatives are to have the desired effect.

Approach to change. Not only do participants need to strike a balance between spontaneity and planning, but they also must become "inquiring change agents" who express faith in one another's ability to succeed while at the same moment questioning the efficacy of the work in which they are engaged. When BYU first began exploring the possibility of placing student teachers in Washington, DC, a natural tension arose between those who were championing the idea and those who were criticizing it. The "champions" pointed to the potential benefits that would come to BYU students who would gain experience in urban education and pupils and teachers in the inner city schools who would gain access to energetic student teachers. While recognizing the potential good that could come from such a project, critics had concerns for the safety of the student teachers and the challenge of providing them with university faculty supervision. Permission was finally granted to pilot test the program with a small number of student teachers, to gather data on its effectiveness, and to then determine its future.

It was through this data collection that participants in the program both at BYU and in the Washington, DC schools began to reflect on the project and to offer suggestions for improving it. The processes for selecting student teachers and mentor teachers and for preparing both groups for the experience became more refined through a process we call "inquiring change agentry," an approach to educational renewal in which all participants examine the experience, discuss needed changes, and work together to implement the changes As participants become inquiring change agents, they take responsibility for the program, invest their energy in its development, and assume the roles of champion and critic as the project progresses.

Amount of change. Regardless of one's approach to change, a partnership continually feels pressure to put into immediate practice every good idea that emerges, and the pressure to perfect what has already been put into place. Thus some members of the partnership push to expand in every conceivable direction, while others want to reduce the size and amount of initiatives to obtain greater "focus." We call the balance point between these two sides of the tension, "disciplined openness," a mindset that allows participants to consider a new idea while contemplating how the idea fits with current partnership work

An example of a balanced approach to change is the current exploration of a new master's program for experienced teachers. As the new elementary cohort program has been implemented in partner schools, some mentor teachers have expressed concern that they are not experiencing the same type of professional growth they see in the undergraduate students they are mentoring. Many of these experienced teachers want to pursue an advanced degree but do not wish to leave the teaching profession to become a counselor or administrator. Neither do they wish to pursue master's study in a single discipline such as mathematics or language arts education They want to develop greater knowledge and skills that will permit them to solve variety of pedagogical problems that emerge from their own classroom practice.

Rather than responding to teachers' requests by immediately admitting all interested applicants to a quickly redesigned master's program, the Partnership has formed a team composed of interested teachers and a representative from the school of education. For the past year the group has been exploring an alternative approach to master's study entitled "educational inquiry". Each teacher has investigated a question that has arisen from her own teaching practice and developed a written plan for implementing the change in her own classroom. Drawing upon this experience, the group is currently developing a proposal for launching a formal master's program in 1997 in educational inquiry The program will rely upon innovative delivery systems within partner schools so that participating teachers and university faculty will be able to fit the program comfortably into their individual schedules.

Evaluation. As changes such as the elementary cohort or the new master's program are implemented, the new approaches must be carefully evaluated. But traditional forms of evaluation are not adequate in a school" university partnership. As mentioned earlier in the paper, a type of "collaborative evaluation" is needed that draws upon partnership relationships (see Osguthorpe, 1996). We have found that the tensions either side of collaborative evaluation--examining only the process or focusing exclusively on outcomes--can be positive forces for collecting valuable data, but that balance must be struck if a partnership is to succeed in its work of educational renewal.

Nowhere among the tensions listed on Table 1 is the need for the authority of shared experience more apparent than in the tension regarding evaluation. While traditional authority for determining the worth of an educational program is often given to external evaluators and administrators, the authority in partnerships is shared by all participants. Everyone's experience counts: student teachers, mentor teachers, teacher educators, prospective principals, mentor principals, etc. And it is in the combined experience of all partners that evaluative methodologies are designed, data are collected, and results are used to inform educational practice.

During the past two years such data have been collected in the BYU-Public School Partnership For example, a doctoral candidate recently completed 19 interviews with partnership participants focusing on perceived changes as a result of the partnership work. In addition, Schlictemeier (1996) completed a detailed case study of teacher education programs in the BYU Public School Partnership as part of his doctoral study at

University of California at Los Angeles. Of particular interest is a study that documents 113 evaluative projects that been associated with the Partnership since its inception in 1983 (see Parent & Williams, 1996).

Currently, collaborative evaluation efforts have been focusing on the new elementary education cohort program being implemented in three school districts These evaluations involve teacher education faculty, faculty in instructional psychology and technology, mentor teachers in participating partner schools, students enrolled in the cohort program, and children in these students' classrooms. Because the new program 'belongs" to all participants, so does the evaluation of its effects. Thus members from each stakeholder group must come to agreement about the worth of the program- the costs versus the benefits of the new approach.

Costs-benefits. When a program is found worthy of broad-scale implementation, partnership members must continually examine its costs as compared with the perceived benefits For example, if teachers in partner schools believe that their contribution of time far exceeds that of the university faculty and also believe that the primary benefits of the teacher preparation program accrue to the university, they will begin to press for "uniformity" of contribution demanding that each partner spend an amount of time that correlates with the benefits received. On other occasions, participants may intentionally not measure the amounts of time and money contributed, believing that such activity can cause interpersonal conflict and diminish the effectiveness of partnership initiatives, The tension between uniformity and diversity of contribution is thus always present in a functioning school-university partnership.

This kind of cost-benefit analysis is currently part of the evaluative process being used to examine BYU's new teacher education program, During the evaluation, both sides of the tension have been manifest. In some instances participants have been concerned about the increased demands on their time; in other cases they have wanted to focus primarily on program goals and postpone an examination of the amount of resources contributed to the endeavor. Finding a balance between these two sides--a position of "parity" in which participants consider not only the purposes behind the program or the need for uniformity of contribution--is essential if the partnership is to endure. The kind of reflection that leads to this type of parity is coming gradually to the elementary education program and to other programs in the BYU-Public School Partnership.

CONCLUSION

In this paper we have described the need for school-university partnerships, drawn upon the BYU-Public School Partnership as an illustrative case, and offered eight positive tensions that are necessary to sustain educational renewal in such partnerships, We have also discussed the role of partner schools and centers of pedagogy as the places that bring various partners together so that they can find the necessary balance between each of the positive tensions that inevitably emerge as change initiatives are designed and implemented. It is our hope that as members of school-university partnerships reflect on the issues that we have raised, their partnerships will be strengthened and their work will lead to significant improvements in the learning of students and the professional development of educators.

References

Clark, R.C. (1986). *School/university relations: Partnerships and networks* (Occasional Paper No. 2), August 1986. Seattle: University of Washington Center for Educational Renewal, Institute for the Study of Educational Policy.

Comer, J.P. (1980). *School power: Implications of an intervention project,* New York: MacMillan.

DeBevoise, W. (1986). Collaboration: Some principles of bridgework. *Educational Leadership, 43* (5), 9-12.

Fullan, M. (1993). *Change forces: Probing the depths of educational reform.* New York: The Farmer Press.

Goodlad, J.I. (1987) *Linking schools and universities: symbiotic partnerships* (Occasional Paper No. 1). Seattle: University of Washington Center for Educational Renewal, Institute for the Study of Educational Policy.

Goodlad, J.I. (1990). Foreword. In M.N. Gomez, J. Bissell, L. Danzier, & R. Casselman, *To advance learning: A handbook on developing K-12 postsecondary partnerships.* New York: University Press of America.

Goodlad, J. I. (1990a). *Teachers for our nation's schools.* San Francisco: Jossey-Bass Publishers.

Goodlad, J. I. (1994). *Educational renewal: Better teachers, better schools.* San Francisco. Jossey-Bass Publishers.

Haberman, M. (1971). Twenty-three reasons why universities can't educate teachers. *Journal of Teacher Education,* 22, 133-140.

Intriligator, B.A. (1982). Interorganizational collaboration: A strategy for faculty development and organization renewal. *Journal of Teacher Education, 33 (5),* 14-17.

Moyers, Bill *The Language of Life: A Festival of Poets.* New York: Doubleday, 1995.

Osguthorpe, R. T. Harris, R. C., Harris, M. F. Black, S. (Eds.) (1995). *Partner schools: Centers for Educational Renewal.* San Francisco: Jossey-Bass Publishers.

Osguthorpe, R. T (April, 1996). Evaluation participative des partenariats ecole-universite aux Etats-Unis Paper presented at the Biennal de 1 Education et de la Formation, Paris, France.

Parent, S. & Williams, D D (October, 1996) Of what value is the Brigham Young University-Public School Partnership? A review of evaluative materials Paper presented at the annual meeting of the Northern Rocky Mountain Educational Research Association, Detroit Lakes, MN.

Russell, T & Korthagen, F. (1995). *Teachers who teach teachers: Reflections on Teacher Education.* London: Falmer Press.

Sarason, S B. Carroll, C.F., Maton, K, Cohen, S. & Lorentz, E. (1977) *Human services and resource networks* San Francisco: Jossey-Bass.

Schlecty, P.C., & Whitford, B.L. (1988) Shared problems and shared vision: Organic collaboration. In K.A Sirotnik & J.I. Goodlad (Eds), *School - university partnerships in action (pp.* 191-204). New York: Teachers College Press.

Schlictemeier, K. (1996). Creating school-university partnerships for educational renewal: A case study of the Brigham Young University - Public School Partnership Doctoral dissertation, University of California at Los Angeles, Los Angeles, CA.

The National Commission on Excellence in Education (1983) A *nation at risk. U.S.* Department of Education, Washington, D C.

The National Commission on Teaching and America's Future (1996). *What matters most: Teaching for America's future.* New York: Teachers College, Columbia University.

PREPARING TEACHERS FOR SCHOOL REFORM, WITH PARTICULAR REFERENCE TO BRUNEI DARUSSALAM

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INTRODUCTION

Although Brunei Darussalam is, in some ways, different from most countries, many of its practices, problems and prospects are also similar to those of most other countries. For example, with a population of approximately 300,000, it qualifies as a "small state"; but it is unique among small states in being an oil-rich Malay muslim monarchy that attained independence barely twelve years ago. At the same time, Brunei Darussalam is unavoidably and irreversibly set on a course of global and technological, as well as social and educational, change.

Like most countries, Brunei Darussalam, has recently been undertaking a major systemic review of education, albeit at the pre-primary and primary levels. The problems identified, such as schools being too examination-oriented, principals lacking in school management skills, teachers requiring special skills to help children with learning difficulties, and pupils lacking in language proficiency, differ little from those of other countries. But, whether far-reaching changes will be recommended and implemented depends on the political will and sense of urgency in preparing the next generation for what is likely to be a vastly different and uncertain future, especially since the government is well aware of the need to equip them with the kind of entrepreneurial zest and know-how that would sustain economic growth through exploration, and generation, of other sources of wealth than petroleum and natural gas, which are likely to run out in the next few decades to come.

While this paper addresses the issues of preparing teachers for school reform in general, specific references will be made to the situation in Brunei Darussalam so as to provide a more realistic framework for examining these issues. Depending on the future scenario of school reform that is being envisioned, it should be apparent that teachers, whether pre-service or in-service, will need to be prepared very differently from the current modes if they are expected to function effectively and efficiently in the new scenario. Hence, this paper will in effect be concerned as much with *teacher preparation reform* as with *school reform*. In so doing, both the *prevailing* and the *preferred* situations in pre-service and in-service teacher education would be examined. It is, of course, recognised that a prevailing situation might have been the preferred one at a different point in time or the preferred situation could be the prevailing one for a different country.

However, since Brunei Darussalam is set in the midst of one of the fastest economic growth regions in the world, a characterisation of the perceived prevailing as well as the perceived preferred situation in some of the Association of South-East Asian Nations (or ASEAN), in general, and in Brunei Darussalam, in particular, might be of interest to the World Assembly. In actual fact, there is considerable diversity among the ASEAN countries in respect of teacher education. For example, there is only one fully government-financed institution each in Brunei Darussalam and Singapore that looks after the range of teacher education programmes from early childhood to primary and secondary teacher education, from pre-service to in-service end postgraduate teacher education, while there are literally hundreds of institutions in Indonesia and the

Philippines that are involved in teacher education of one kind or another, with a large proportion of those in the Philippines run by the private sector. However, in terms of structure and conceptualization, as well as research concerns (Sim, 1991), there is a large degree of similarity.

There is an abundance of literature on *teacher preparation* as well as on *school reform,* although considerably less on the juxtaposition of these two areas of concern. However, each of these areas is multi-faceted. We could be concerned with questions of *what, why, how, when, where, who, for whom, to what extent,* and so on. However, for purposes of this paper, only two facets would be chosen for each of these areas. Likewise, although it is recognised that each facet is manifested in a variety of ways, only two contrasting aspects will be considered for each facet.

For school reform, the two facets considered are those that vary according to *scale* or pace of reform *(evolutionary* versus *revolutionary)* and *scope* or nature of reform *(restructuring reconceptualising).* For teacher preparation, the two pertinent facets differ according to *stage* or phase of preparation *(pre-service* versus *in-service)* and *state* or status of preparation *(prevailing* versus *preferred).* Although the combination of the two facets for school reform would result in four different types of scenarios, only two contrasting scenarios would be considered, namely the *evolutionary restructuring* and *revolutionary reconceptualising* scenarios. For each of these school reform scenarios, however, the pre-service and in-service scenarios would be discussed together in terms of the *prevailing as* well *as* the *preferred scenarios.*

The two sets of scenarios are depicted in **Tables** 1 and 2 as follows:

Table (1)
Possible Scenarios for School Reform

Scale of School Reform	**Restructuring (S)**	**Scopre of Scool Reform Reconceptualising (C)**
Evolutionary (E)	ES	EC
Revolutionary (R)	RS	RC

Table (2)
Possible Scenarios for Teacher Preparation

State of Teacher Prep.	**Pre-Service (S)**	**Stage of Teacher Preparation In-Service (C)**
Prevailing (V)	VS	VC
Preferred (F)	FS	FC

Thus, for each of the ES and RC scenarios of School Reform, the prevailing (VS + VC) and the preferred (FS + FC) scenarios for Teacher Preparation would be considered in turn.

School Reform Scenarios

In a literal sense, to reform is *"to improve an existing institution, law, practice, etc. by alteration or correction of abuses, to give up or cause to give up a reprehensible* *habit or immoral way of life."* (Hands, 1986). While this connotation for "reform" would be appropriate to its use in "reform school", it is quite inappropriate when used in "school reform," where abuse, reprehensible habit or immorality is rarely, if ever, the basis for school reform in the sense of a major transformation or change to a school or schools.

According to Hargreaves (1994), "The rules of the world are changing. It is time for the rules of teaching and teachers' work to change with them." He identified the following seven key dimensions of postmodernity, which should impel school reform, even though they tend to be rather paradoxical or ironical:

1. ***Flexible Economies***. *"Occupational flexibility and technological complexity* create needs for diversity but also tendencies towards divisiveness."

2. ***The Paradox of Globalisation.*** This "creates *national doubt and insecurity* and carries with it dangers of resurrecting and reconstructing traditional curricula of an ethnocentric and xenophobic nature."

3. ***Dead Certainties.*** *"Moral and scientific uncertainty* reduces confidence in the factual certainties of *what is* taught, decreases dependency on scientifically 'proven' 'best methods' of *how* things are taught, and makes it difficult to secure moral agreement about *why* things are taught."

4. ***The Moving Mosaic.*** "While *(organisational fluidity* or) 'moving mosaic' structures of work organisation can be flexible and responsive, they can also be manipulative, with the organisational parts being manoeuvered by a non-accountable and inaccessible core."

5. ***The Boundless Self.*** *"Personal anxiety* and the search for authenticity becomes a continuous psychological quest in a world without secure moral anchors. The focus on staff development as self-development reflects this process."

6. ***Safe Simulation.*** *"Technological sophistication and complexity* create a world of instantaneous images and artificial appearances.... Contrived cooperation in the classroom and contrived collegiality in the staffroom are examples of safe simulations that can denude the collaborative process of its vitality and spontaneity."

7. ***Compression of Time and Space.*** This "can lead to greater flexibility, improved responsiveness and better communication in our schools, but it can also create intolerable overload, premature bumout, superficiality and loss of purpose and direction."

It is, of course, debatable whether the foregoing characterisation applies to a large or equal extent to the countries in the ASEAN region. But there is little doubt that the postmodern trend is perceptibly affecting these countries, especially in the main cities. With increasing attainment of universal education, increasing levels of education of parents, increasing mass media exposure to other educational systems, increasing accessibility to information networking, increasing globalisation of educational endeavours, and so on, there is also a corresponding manifold increase in demands for school reform.

Thus far, the so-called school reforms that are taking place in ASEAN countries may be characterised as *Evolutionary Restructuring* rather than *Revolutionary Reconceptualisating*. Sometimes, new curricula are introduced, but, even though new approaches were being suggested, teachers were slow in adopting or adapting them, reverting to traditional practices whenever they felt that they were not being observed.

For instance, during the 1960s and 1970s, many new science and mathematics curricula were being introduced in Malaysia. In its evaluation, the team led by the writer (Sim et al., 1973) commented that it was *"bothered by the probability, which appears to be reasonably high in our estimation, that beneath the ice-berg of quite a few additional comments by principals, teachers and, in some cases, state science supervisors or organisers, who generally preface them with remarks such as. 'Please don't quote me ...,' 'These are my personal (and not official) views ...,'* or *'I'd like to say what I really think but I hope you will not include my remarks in your report .. ..,' lie the recalcitrant clues to the persistent problems confronting Science and Mathematics Education in this country."*

Lest its detailed findings escaped important stakeholders who might be able to flip through the report, the team tried to encapsulate the main findings and recommendations in two words, "paternalism" and "Janus-face," which were defined and illustrated by means of two drawings as the frontispiece of the report. Thus, apart from the drawings, the following statement attempted to characterise the essence of the report:

> *"Our overall finding is that the major problem confronting the Science and Mathematics curriculum reform lies in a kind* ***of paternalism*** *which comprises 'a complacent, over-protective attitude that has a tendency to stifle initiative and reinforce over-dependence.' Our overall recommendation might similarly be characterised by* ***Janus-face,*** *which we have interpreted as the 'maintenance of an orchestrated perspective, involving having to look in at least two directions simultaneously.'"*

From time to time, new approaches are being introduced, such as deBono's CoRT programme and a Reading and English Language Acquisition (RELA) programme in Brunei Darussalam. While the former is piecemeal and does not articulate with the total curriculum, the latter is slowly evolving and struggling to retain the teachers trained for the programme as many are being diverted to other new programmes.

The major review of the education system in Singapore in 1978 (Goh, 1978), which provided compelling empirical evidence to support its far-reaching recommendations, is basically a restructuring exercise. As the system has been closely monitored, some fine-tuning continues to be made as the system of streaming evolves. Interestingly, Brunei Darussalam is also beginning to introduce streaming, but at the secondary level, such as the GCE 'N' level examination for those in less academic streams and, more recently, a so-called Level 2 curriculum for those who have repeated their Primary Certificate in Education examination twice.

Perhaps the current concerted push towards maximum exploitation of information technology in some ASEAN countries, such as Malaysia's *Multimedia Super-corridor* and Singapore's *IT Master Plan*, could result in a *Revolutionary Reconceptualising* of the school system, which would require not only a total commitment to change in all relevant areas, but also a total rethinking of what it takes to bring about reform towards educational excellence. There have been many promising innovations from the west which might obviate the necessity to re-invent the wheel if ASEAN countries are keen on *Revolutionary Reconceptualising* rather than *Evolutionary Restructuring*. For example, Adler (1982) proposes *Paideia schools*, where emphasis is on high academic thinking through:

1. the acquisition of organised knowledge

2. development of intellectual skills, and
3. enlarged understanding of ideas and values.

He further advocates three different ways of learning, namely:

1. didactic instruction
2. coaching and
3. Socratic teaching.

Sizer (1984) has been actively involved in introducing a *Coalition* of *Essential Schools,* or high schools which systematically reduce the number of subject matters for the sake of more deeply pursuing core subject matters and emphasise the idea of *"authentic work",* where students engage in genuine intellectual inquiry.

Grimmett (1995) discusses the characterisation of *Revitalised Schools,* in terms of their emphasis on:

1. Inquiry processes: *"A primary purpose of revitalised schools is to encourage teachers to understand and engage the minds of learners."*

2. Collaborative work context of inquiry: *"An important aspect of teaching and learning in revitalised schools is that the work context of inquiry and student learning is collaborative in the sense that teachers and students negotiate meaning and work activities together."*

3. Teachers' sentiments: *"Teaching is not just a job for teachers in revitalised schools, it is a vocation for which they have developed a passion. They are obsessed by the urge to 'help others learn and grow'."*

4. Sponsoring the teachers' voice: The teachers develop *"a moral voice. They speak on behalf of students. They make promises to students the intend to keep; they reach out to difficult or withdrawn children to include them in the group; they involve students in curriculum-making; they insist that the work be that of the students and not an imposition of the teacher, they are prepared to take risks and face ridicule to contend for student-oriented opportunities to learn."*

5. Viewing knowledge as humanly constructed: " *Teachers in revitalised schools view knowledge problematically, not as being given by external experts but as being constructed by human agents in the personal and social settings of learning."*

Perhaps the most compelling ideas on school reform are associated with Perkins' *(1992) Smart Schools.The goals* of such schools entail the retention, understanding and active use of knowledge, or the development of *generative knowledge,* which *"does not just sit there but functions richly in people's lives to help them understand and deal with the world."* The means for achieving the *goals* are found in *thoughtful learning.* According to Perkins, " *We need schools that are full of thought, schools that focus not just on schooling memories but on schooling minds."*

Yet another perspective is offered by the Sim & Yip (1990), who suggested a framework for reforming education by integrating individual student needs, which should be the main concern of the Ministry of Education, with societal needs, which should involve the other Ministries. As shown in Fig. 1, there are four main types of *Individual* needs:

1. *Intellectual* needs, not only in terms of the basics, but also critical and creative thinking.
2. *Industrial* needs, in terms of awareness of the world of work and work ethics, including attitudes towards relearning.
3. *Intrapersonal* needs, in terms of physical, mental and spiritual health, as well as aesthetic appreciation.
4. *Interpersonal* needs, in terms of being sociable and empathetic.

In preparing students to be useful citizens, the needs of *Society* should also be taken into account. Again four main types of Societal needs were delineated and each of them was associated with several Ministries which existed at that time:

1. *Security* needs, in terms of personal safety and legal protection, which were taken care of by the Ministries of Defence, Home Affairs and Law.
2. *Stability* needs, in terms of economic viability and productive occupation, which were taken care of by the Ministries of Finance, Trade and Industry and Labour.
3. *Sustainability* needs, in terms of personal and environmental health and quality of life, which were taken care of by the Ministries of Health, Environment and National Development.
4. *Sensitivity* needs, in terms of social intercourse and interpersonal and international relations, which were taken care of by the Ministries of Community Development, Communication and Information and Foreign Affairs.

The writer has composed two songs, one for each of two sets of needs. Thus, *Y.A.S.! (You* Are Special!), as shown in **Annex** 1, is supposed to depict the needs of individuals, while *N.A. Y.* ? (National Are You?), as shown in **Annex** 2, is supposed to characterise the needs of society.

It is envisaged that the conceptual framework is sufficiently generic to apply to other countries. For example, the various Ministries associated with each of the societal needs are shown in **Table** 3 for Brunei Darussalam and Malaysia, as well as for Singapore, since there has been some slight changes in the line-up of Ministries since the framework was first applied. The framework also highlights three important perspective that are essential for school reform:

1. The *Systemic* perspective, in that the essential components are viewed together as a total system.
2. The *Synergistic* perspective, in that a proactive stance could be employed by thinking simultaneously of individual and societal needs.
3. The *Symbiotic* perspective, in that stakeholders may be identified for collaborative action for mutual benefit.

Fig. 1 Relations between Individual and Social needs.

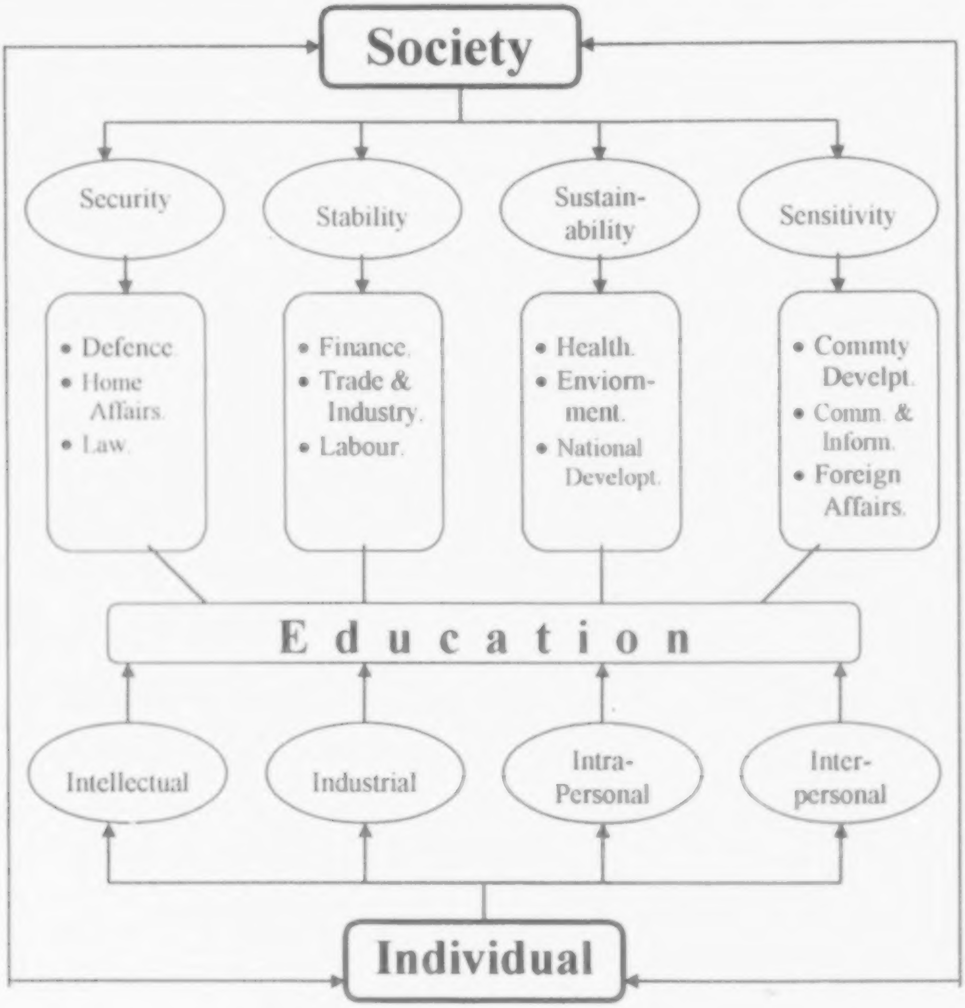

Society
Security
Stability
Sustainability
Sensitivity
• Defence.
• Home Affairs.
• Law.
• Finance.
• Trade & Industry.
• Labour.
• Health.
• Enviornment.
• National Developt.
• Commty Develpt.
• Comm. & Inform.
• Foreign Affairs.
Education
Intellectual
Industrial
Intra-Personal
Inter-personal
Individual

Table (3)
Ministries associated with Societal Needs: Three-countries comparison

	SECURITY NEEDS	STABILITY NEEDS	SUSTAINABILITY NEEDS	SENSITIVITY NEEDS
BRUNE DARUSSALAM	•Defence. •Home Affairs. • Law.	• Finance. • Industry & Primary Resources.	• Development. • Culture, Youth & Sports • Health.	• Foreigh Arrairs. • Religious Affairs. • Communication.
SINGAPORE	• Defence. • Home Affairs. • Law.	• Finance. • Trade & Industry. • Labour.	• National Development. • Community Development. • Health. • Environment	• Foreign Affairs. • Communications. • Information & the Arts.
MALAYSIA	• Defence. • Home Affairs. • Law & Cooperative Development.	• Finance. • International Trade & Industry. • Primary Industries. • Agriculture. • Human Resource. • Enterpreneiur Develpoment • Domestic Trade & Consumer Affairs. • Rural Devt.	• National Unity & Community Development. • Youth & sports. • Science, Technology & the Environment • Housing & Local Govt • Transport • Works • Health • Oublic Services	• Foreign Affairs • Information • Culture, Art & Tourism

Preparing Teachers: Prevailing Scenarios

It is perhaps an understatement to say that there has been considerably more research and reflection on teacher education in the western literature than in what has been published in Asia. (e.g., Galton & Moon, 1994; Holmes Group, 1995; Houston et al., 1990; Reid et al., 1994; Tisher & Wideen, 1990; Wideen & Grimmett, 1995). It has also been the case that Asian writers have been less self-critical than their western counterparts.

Recently, in the process of reviewing its various programmes for preparing teachers, the Sultan Hassanal Bolkiah Institute of Education decided to convene a National Colloquium *"Towards Developing and Strengthening Partnerships in Teacher Education"* on 16 - 19 September, 1996. Representatives from the Institute, the Ministry of Education and the schools took part in the process of re-examining practices, problems and prospects of the early childhood teacher education, the primary teacher education, the secondary teacher education, teaching practice and in-service teacher education programmes. In order to provoke the participants to be more self-critical, some "briefs" were specially prepared to highlight issues that have received scant attention.

In order to provide a flavour of the issues that confronted the participants, the following statements on Problems and Prospects of Teaching Practice (Sim et al., 1996) are reproduced in full:

Problems

Even though hardly any research has been conducted in the area of teaching practice in Brunei Darussalam, few, if any, would disagree that TP is a crucial component in pre-service teacher education. Studies of beginning teachers' perceptions in other countries have invariably pinpointed TP as the most useful component. And yet, judging from the following critical reflection of current practices at SHBIE, TP has apparently not been accorded the highest priority it deserves.

(a) *TP seems to be more* ***ritualistic*** *than relevant, in that most staff SHBIE seem to be more concerned about routine procedures and fulfilling the number of weeks of TP and the number of visits per student rather than exploring and sharing better ways of conducting TP supervision and evaluation.*

(b) *TP has tended to be treated as a separate* ***entity outside of term time and not articulated*** *with other components of the programme. Until recently for primary teacher education, TP is held during the long vacation and, especially for staff who have to travel long distances to supervise the student teachers, the block of vacation time for possible sustained research is being sacrificed. In the case of secondary teacher education, TP continues to be conducted during the long vacation,since,understandably the other Faculties that conduct content courses would not be supportive of having to confine their teaching per semester to only those weeks when their students are not away from the campus for TP. These teachers are also at a disadvantage compared with their contemporaries in the primary teacher education programmes, or in non-education programme, as they will not be able to begin employment until they have completed TP during the long vacation.*

(c) *Those in charge of* ***Methods of Teaching or Curriculum Studies*** *courses seldom, if at all, share with other lecturers, who have also to be involved in TP supervision,what they look for in their respective subjects. There is little or no attempt by supervisors to compare, let alone discuss, the criteria they use in evaluating TP, and the process of TP supervision so as to ensure greater consistency in supervision and evaluation practice.*

(d) *So far, TP* ***carries little or no weight*** *in the final degree/certificate classification exercise, partly because there is not much variance in the pass grades and partly because the TP grades are received after the University Exam. Board meets, when students are classified on the basis of theory grades, albeit subject to their passing TP.*

(e) *There is no due recognition of TP in the form of a* ***book prize,*** *as is the case of other Faculties that award book prizes to their top students for each subject.*

Instead, there are overall book prizes, but, as indicated above, TP grades seldom count, if at all.

(f) *When there are more than one stage of TP, the differentiation, if any, between the stages is more in the nature of teaching different subjects (e.g. major or minor subjects) rather than a* ***progressive shift*** *towards developing the kind or type of teacher required (e.g from one interested only in survival skills to one actively applying reflective inquiry).*

(g) *There are no guidelines on the appointment of* ***co-operating teachers*** *and little, or no, attempt to ensure that they are properly briefed on their expected roles and functions, especially in terms of partnership in the professional development of future colleagues.*

Prospects

Rather than cosmetic tinkering, a radical review of TP is essential, including such features as the following:

(a) ***Progressive differentiation*** *of the stages of TP, starting from an initial preparation or orientation, through supervised classroom practice, to reflective experience, including possible action research for improving practice.*

(b) *Provision for* ***individual differences*** *through differentiated experience and supervision, with exposure to a representative sample of classroom situations which call for confident and competent teaching.*

(c) *Re-examination and validation of the* ***evaluation instruments,*** *including regular attempts by supervisors to compare the criteria they use in evaluating TP in order to ensure greater consistency in supervision and evaluation practices.*

(d) *Review of the* ***weightage accorded to TP*** *in the overall grading, including the avoidance of TP being held at the end of the final year and the possible inclusion in the transcript of particular strengths in teaching.*

(e) ***Articulation*** *of TP with other courses in the programme and mobilisation of* ***all academic staff*** *in TP supervision.*

(f) *Special* ***workshops or courses on supervision*** *for co-operating teachers, including certification for becoming associate supervisors, after completion of a stipulated number of courses.*

(g) ***Systematic evaluation and documentation*** *of TP experiences and observations, the establishment of school profiles, including special strengths in supporting the* ***optimal development*** *of student teachers as* ***skillful, informed and reflective professionals.***

While similar problems and prospects were discussed in respect of the other programmes, the main shortcomings of the prevailing scenarios for preparing teachers may be summarised in terms of the following generalisation:

1. Those responsible for developing and implementing programmes and activities in teacher education have tended to be input-oriented rather than output-oriented in the sense that they view teacher education from only their specialised vantage points of what they are willing and able to do rather than what is most beneficial to preparing the kinds of teachers who are, in turn, likely to benefit the schools optimally. There is therefore a lack of a *Systemic* perspective, where individual and collective decisions are made with clear understanding of how the parts are related to each other and to the whole system.

2. There seems to be a reluctance to invest in innovative initiatives for conserving effort by re-examining assumptions pertaining to sacred structures and ritualistic practices, such as was carried out by Tom (1995), and actively search for more effective, more efficient and more equitable ways of preparing teachers. There is therefore a lack of a *Synergistic* perspective, where proactive measures are being explored to optimise value-added outcomes of teacher preparation.

3. Few teacher educators are good role models of collaborative and cooperative learning, which has been much touted by them. While it is useful to be aware of the dangers of collaboration, such as when it becomes *"comfortable and complacent, conformist, contrived and cooptative"* (Hargreaves, 1994), there is a lack of a *Symbiotic* perspective, where teacher educators have more to gain through sharing of their expertise and experience in collaborative action than in operating alone.

Preparing Teachers: Preferred Scenarios

The recent National Colloquium also discussed future directions, while taking into consideration some useful inputs from five eminent scholars from overseas. In response to the variety of inputs, the writer (Sim, 1996) attempted to highlight the main issues in orchestrating partnerships in teacher education in terms of the following eight pairs of Cs:

1. Change & Continuity
2. Context & Coherence
3. Comprehensiveness & Complementarity
4. Creativity & Credibility
5. Confidence & Competence
6. Communication & Congruence
7. Commitment & Care
8. Co-operation & Competition.

While it is beyond the scope of this paper to exemplify and elaborate on each of them to the degree that was possible at the National Colloquium, it is hoped that the following brief explanations would suffice to convey the crucial points in establishing partnerships in teacher education:

1. Change & Continuity

Teacher education needs to prepare teachers for a rapidly changing environment. Not only must teachers be aware of important trends affecting the family, the community, the nation and the world, but they need also to reflect on how they themselves should change in order to prepare the future generation for the changing scenario. In this regard, the initial preparation, induction and in-service education of teachers need to be viewed as part of a continuum of life-long professional development. The change from an existing to a new system should therefore be continuous rather than abrupt, as we do not want to throw away the baby with the bath water.

2. *Context & Coherence*

Student teachers need to be exposed, either experientially or vicariously, to different contexts in the same or in different schools. They should then be able to develop coherent adaptive teaching approaches, based on what different types of students need rather than what they want. While preparing them for different environments that exist at present, it is also important to prepare them for a future environment. Although crystal-ball gazing is a tenuous task, it is possible to be proactive by preparing for a future, desirable scenario. For instance, in the early 1980s, when the writer, as Director of the Institute of Education in Singapore, talked to newly graduated teachers, it became apparent that innovative ideas that they learnt in pre-service education have had to be abandoned simply because there was little or no support from their principals and heads of department. With encouragement and support from the Ministry of Education, we were able to mount special programmes for preparing prospective principals and heads of department for more instructional and transformational leadership. Judging from feedback from newly graduated teachers some eight or more years later, this approach of taking the total context into consideration and the need to ensure coherence in the development of all personnel in schools has apparently paid off.

3. *Comprehensiveness & Complementarity*

The framework for inter-programme partnerships is meant to be comprehensive in dealing with all conceivable kinds of partnerships within SHBIE as well as between SHBIE programmes and other programmes and to highlight the complementary nature of the various programmer. While ad hoc arrangements are unavoidable, investment in strategic planning through systemic and proactive approaches is crucial for teacher education. There is strong conviction that human and other resources could be significantly conserved in teacher education if excess curriculum baggage is drastically trimmed, while course articulation and staff complementarities are taken seriously into account.

4. *Creativity & Credibility*

Needless to say, the increasing opportunities and constraints challenge teachers and teacher educators alike to be creative and innovative. However, to reduce the degree of risk-taking and enhance their credibility, they need to be more research-oriented and endeavour to support important practices with empirical evidence. Some workshops have suggested that academics should attach themselves to schools and demonstrate that their new ideas are workable by trying them out in these schools. It may not, however, be possible for them to be attached for a substantial period of time, unless they utilise, or sacrifice, their leave to do so. Alternatively, they might be able to arrange with schools to turn up once a week, assuming that their teaching load at the university is not too heavy.

5. *Confidence & Competence*

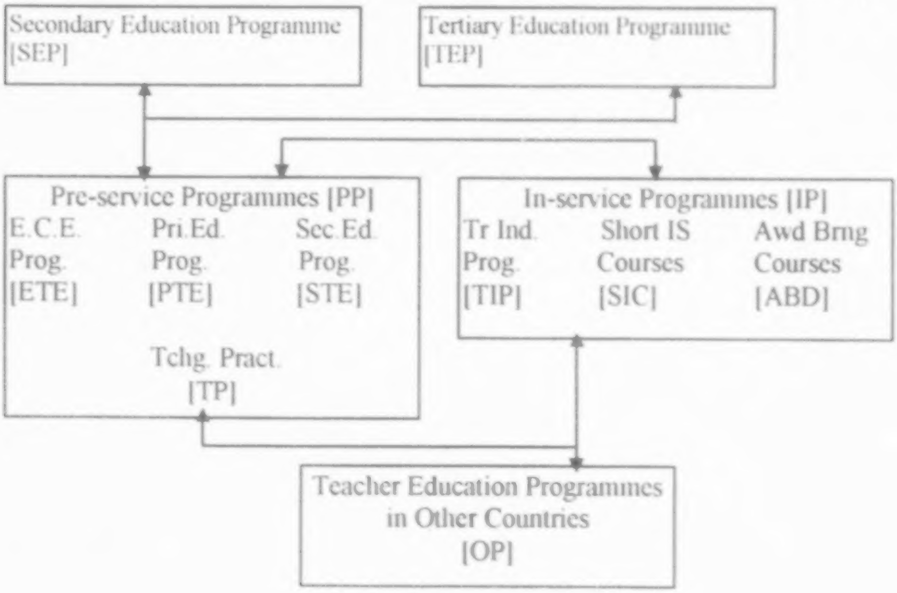
Besides incorporating research, especially action research, into all teacher education programmes - pre-service, in-service and postgraduate -, a number of collaborative research projects will hopefully help teachers to be more confident and competent in reflective self-regulation. Even teacher educators need to develop confidence and competence, unless they subscribe to Shaw's adage that: *Those who can do, those who can't teach,* together with a cynical addendum that: *Those who can't teach, teach others to teach.* Some workshops have also stressed the importance of developing confidence and competence among Cooperating Teachers through special courses on mentoring, supervision and evaluation. This is precisely what we at SHBIE have been thinking of, but the courses need to be carefully planned and will therefore take a little while for them to be offered.

6. *Communication & Congruence*

While exploring a variety of ways of communicating with our partners schools and the Ministry in particular -, such as via publications, seminars and electronic networking, the Sultan Hassanal Bolkiah Institute of Education hopes to develop greater congruence in the approaches and beliefs that underpin teacher education initiatives by investing more in the training of educational leaders through postgraduate programmes and in-service courses for specialist teachers and co-operating teachers. In the meantime, it is important to recognise that there is usually considerably more congruence than differences among the various stakeholders in terms of what is desirable in teacher education. We therefore need to develop and strengthen communication and congruence through intra- as well as inter-programme partnerships. With regard to inter-programme partnerships, the following framework as shown in Fig. 2 has been suggested:

(Fig. 2)

Suggested Framework For Considering Inter-Programme Partnerships


Secondary Education Programme [SEP]
Tertiary Education Programme [TEP]
Pre-service Programmes [PP]
E.C.E. Prog. [ETE]
Pri.Ed. Prog. [PTE]
Sec.Ed. Prog. [STE]
Tchg. Pract. [TP]
In-service Programmes [IP]
Tr Ind. Prog. [TIP]
Short IS Courses [SIC]
Awd Brng Courses [ABD]
Teacher Education Programmes in Other Countries [OP]

7. *Commitment & Care*

While different conceptions of the ideal teacher are possible, teacher education needs to be steadfast in its commitment to, and care of, teachers who are interested in developing some of the characteristics of an ideal teacher. Many workshops have highlighted the importance of commitment and the importance of care has been stressed, especially in early childhood education. While different people will have different conceptions of what constitutes an ideal teacher, the one that the writer has been using is embodied in a song, entitled *To Teach,* where Teach is both a verb used to characterise what an ideal teacher does as well as a noun which is a colloquial term for a teacher, to whom the song is dedicated. The eight qualities that are highlighted in the song are that the ideal teacher is one who is *Task-oriented, Enthusiastic, Autonomous, Caring, Humorous, Enterprising, Reflective* and *Skillful*

8. *Co-operation & Competition.*

While it is important to stress independence rather than dependence, it is possible to develop a kind of interdependent independence in teacher education by using co-operativeness to achieve competitiveness, For instance, assignments or projects have been designed to encourage students to work in groups as well as individually. While differentiation will be based on their individual efforts, the group component will encourage them to seek ways, as well as to develop propensities, to function as effective team members.

The main issues or ideas discussed in respect of pre-service teacher education, in-service teacher education and teaching practice vis-a-vis the eight pairs of Cs are shown in **Tables** 4, 5 and 6. It would be beyond the scope of this paper to discuss these issues or ideas any further. Instead, it might be useful to note that the eight pairs of Cs may be re-grouped under three categories which are associated with the three *"meta-strategies"* that have been employed in reconceptualising the strategies that are being formulated for the current exercise in Strategic Planning for the Sultan Hassanal Bolkiah Institute of Education. A meta-strategy is itself a strategy, but one that provides an integrative framework for other strategies. The three meta-strategies that have been identified are the *"systemic," "synergistic"* and *"symbiotic"* meta-strategies.

The *Systemic mesa-strategy* may be defined as the *Strategy of viewing the entire system, as well as its sub-systems and supra-systems, in terms of structural, functional and interactive relationships and relevant inputs, throughputs and outputs.* The writer has often used a bird analogy to characterise a meta-strategy. In the case of the *systemic meta-strategy,* it is analogous to *Having a bird 's eye view, as well as a worm 's eye view.* It involves a panoramic or *comprehensive* view of the the whole situation, while at the same time recognising the importance of *contextual* differences and *complementary* relationships. It also emphasises the need for *coherence* in viewing various inter-relationships as well as *continuity* in taking cognisance of the time perspective, especially when *change* occurs. Hence, the Systemic meta-strategy is closely related to the three pairs of Cs, namely *Change & Continuity, Context & Coherence and Comprehensiveness & Complementarily.*

The *Synergistic mesa-strategy is* defined as the *Strategy of generating wider-ranging, value-added outcomes through proactive planning and the innovative integration of otherwise disparate actions.* Again, using a bird analogy, this is like *Killing two or more birds with one stone, and retrieving the stone for further re-use.* Innovative or *creative* thinking is required in order that the outcomes produce greater mileage. However, in order that the new ideas would be more acceptable, or *credible,* some empirical evidence would be needed through investment in research. As a matter of fact, it is hoped that ultimately, the teaching profession would be research-oriented. For this purpose, they need to develop *confidence* and *competence* in research over their normal teaching functions. The Synergistic meta-strategy is therefore closely related to the two pairs of Cs, namely *Creativity & Credibility* and *Confidence & Competence.*

Finally, the *Symbiotic mesa-strategy* may be defined as the *Strategy of seeking collaborative involvement, and possible networking, of relevant stakeholders for mutual benefit.* Using a bird apology once again, this situation is similar to that of *Getting birds of the same feather, as well as birds of different feathers to flock together.* In dealing with people, or the featherless birds, the need to avoid *communication* breakdown, and reach *congruence, is* crucial, especially in view of the diversity of backgrounds and perspectives. When the team members or partners are more *committed* and *caring,* it would be possible for them to collaborate or *co-operate* and, through teamwork, become *competitive* at the same time. Hence, the Symbiotic meta-strategy viewed as being closely related also to three pairs of Cs, namely *Communication & Congruence, Commitment & Care* and *Co-operation & Competition.*

CONCLUSION

It is patently clear that teacher preparation reform should not only be a continuing process, but also one that proceeds in tandem with school reform. As a matter of fact, teachers need to be prepared not only to deal with the current scenario, but also with future desirable and plausible scenarios. In this regard, teacher educators need, in the first place, to adopt a *systemic* view of likely individual and societal needs that the school system, together with possible partners, can and should endeavour to help fulfill. As their roles in teaching, research and community service are numerous and complex, they should also actively search for *synergistic* ways of addressing the anticipated problems, such as by having research in-built with teaching and community service as well as helping to develop a research-oriented teaching profession. Obviously, they would also need to develop *symbiotic* relationships with relevant partners in collaborative programmes and projects for the benefit of all.

While much of teacher preparation reform is likely to be *evolutionary* in nature, when the opportunity lends itself, teacher education institutions must push towards *revolutionary* changes as well. Whether we speak of reforming, revitalising, reengineering or reinventing teacher education, it is healthy to invest in such a process from time to time. Hopefully, the process should not be entirely *restructuring* nor *reconceptualising,* for they should go hand in hand. Although teacher educators, who preach the need for change, are never comfortable with change themselves, the only way to prepare teachers for school reform is for teacher educators to prepare themselves for teacher education reform. At least, at the Sultan Hassanal Bolkiah Institute of Education, the initial steps have already been taken for a journey that is going to be less than smooth.

Table (4)
Examples of Important Issues or Ideas on Pre-service Teacher Education

Issues / Ideas		Pairs of Cs
1.	Need to prepare teachers for changing environment (e.g. changing family, concepts of learning and technology).	Change & Continuity
2.	While long term plans are afoot to develop innovation-supportive environments, student teachers must also learn to adopt, and later improve on, existing practices.	Context & Coherency
3.	There is need to explore, and capitalise on, inter-programme partnerships of various kinds.	Comprehensiveness & Complementarily
4.	Academics could be attached to schools, say one day per week, and be involved in collaborative teaching and research.	Creativity & Credibility
5.	Collaborative research projects like CATER will help teachers to be more confident & competent in reflective self-regulation.	Confidence & Competence
6.	Communicating with schools and Ministry through properly edited newsletters, email & invitation to meetings, sometimes conducted by school or Ministry representatives.	Communication & Congruence
7.	Conception of "ideal teacher," with positive attitudes and high degree of motivation, to be developed and reinforced.	Commitment & Care
8.	Students should experience, and be assessed, working co-operatively and individually.	Co-operation & Competition

Table (5)
Examples of Important Issues or Ideas on In-service Teacher Education

Issues / Ideas		Pairs of Cs
1.	Planning for continuing professional development for all.	Change & Continuity
2.	Pattern of personal development is as important as monetary and other incentives for teacher involvement in professional development.	Context & Coherency
3.	Linking pre-service and in-service teacher education as well as teacher induction, short courses and award-bearing courses.	Comprehensiveness & Complementarily
4.	Need for systematic and systemic needs survey.	Creativity & Credibility
5.	Collaborative research agenda on Developing Professional Competence.	Confidence & Competence
6.	Communicating goals, principals and models of quality professional development.	Communication & Congruence
7.	Importance of action research and sustained commitment.	Commitment & Care
8.	Importance of school-based and school focused in-service course.	Co-operation & Competition

Table (6)

Example of Important Issues or Ideas on Pre-service Teaching Practice

Issues / Ideas		**Pairs of Cs**
1.	Need for progressive differentiation of the stages of TP.	Change & Continuity
2.	Placement of student teachers for TP to be based on needs rather than their choices.	Context & Coherency
3.	Need for TP to be articulated with other courses, especially MOT/CS and Pedagogical Studies courses.	Comprehensiveness & Complementarily
4.	Innovative approaches, such as involvement of student teachers in critical reflection and collaborative action research, should be researched and evaluated.	Creativity & Credibility
5.	Orientation or training of-co-operating teachers, especially on teacher supervision and evaluation.	Confidence & Competence
6.	Supervisors in SHBIE need to concur in what and how they supervise and evaluate before attempt to communicate what are expected of co-operating teachers.	Communication & Congruence
7.	possible variations in TP arrangements not only among different pre-service programmes but also for different student teachers.	Commitment & Care
8.	Pairing or teaming should be explored during TP, while encouraging individuals to develop their pedagogical competence as fully as possible	Co-operation & Competition

Y.A.S!

CHORUS:

Y.A.S! You Are Special
You are an individual
Not just a boy, or a girl;
Nor normal, or monolignual
Y.A.S! You Are Special
You are an individual

VERSE 1

Your needs are Intellectual.
To see beyond the visible.
To think of things unthinkable.
It's really Y.A.S, it's real.

→ ***Intellectual needs such as:***
Developing critical thinking.
Developing creative thinking.

VERSE 2

Your needs are Industrial.
To optimise your potential.
To change with changes changeable.
It's really Y.A.S., it's real.

→ ***Industrial needs such as:***
Optimising Potential.
Optimising Adaptability.

VERSE 3

Your needs are Intrapersonal.
To love things eternal;
To be healthy, not jut physical.
It's really Y.A.S., it's real.

→ ***Intrapersonal needs such as:***
Sustaining Interests.
Sustaining Health.

VERSE 4

Your needs are Interpersonal.
To learn how to be sociable.
To be open, yet not guillible.
It's really Y.A.S., it's real.

→ ***Interpersonal needs such as:***
Relating Socially.
Relating Wisely.

N.A.Y.?

CHORUS:

National are you? N.A.Y.? National are you?
Do you only satisfy individual needs?
Or do you try to satisfy individual needs
With the view to satisfy societal needs?
National are you? N.A.Y.? National are you?

VERSE 1

How do we build a secure society?
To its total defence, we all should rally,
Subversives at home would really have to worry;
As justice is assured by the laws of the country.

Security needs:
supported by:

Ministries of Defence,
Home Affairs
and Law

VERSE 2

How do we build a Stable society?
With financial reserves strong and steady.
For trade and industry, we have a global strategy;
Our labour force is committed to productivity

Stability needs
supported by:

Ministries of Finance,
Trade & Industry
and Labour

VERSE 3

How do we build a Sustainable society?
Where we all stay healthy in mind and body.
We need to ensure our environment is clean & tidy;
Good housing and utilities are available aplenty.

Sustainability needs
supported by:

Ministries of Health,
Environment and
National Development

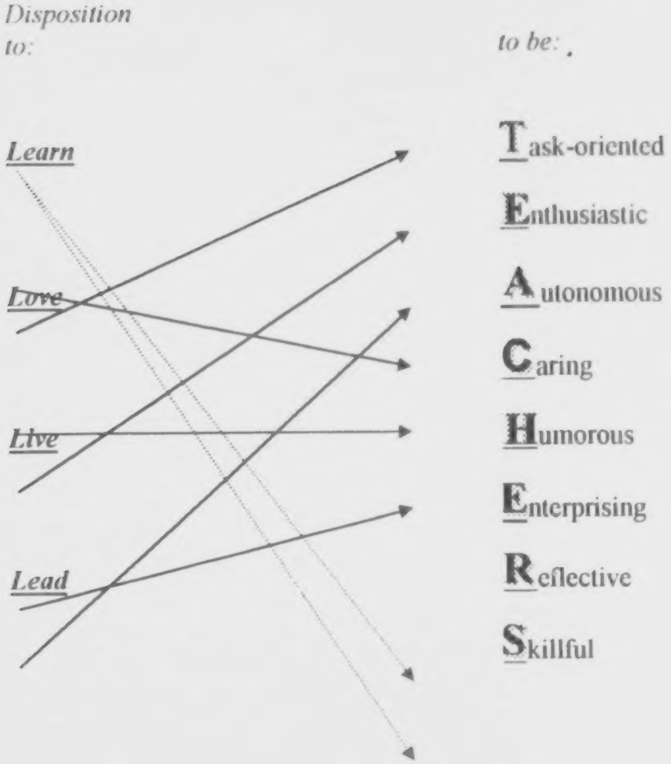
VERSE 4

How do we build a Sensitive society?
We'll develop and care for all in our community.
To communicate, we'll apply information technology;
With other countries, we'll live in peace & harmony.

Sensitivity needs
supported by:

Ministries of Community
Development,
Communication and

Qualities of
Good TEACHERS



Disposition to:

Learn

Love

Live

Lead

to be:

Task-oriented

Enthusiastic

Autonomous

Caring

Humorous

Enterprising

Reflective

Skillful

TO TEACH

CHORUS:

If only dreams come true;
If only Teach would teach,
And Practise what we‘d preach-
To learn, to love, to live, to lead

VERSE 1:

To teach is to learn, to learn how to learn.
If Teach does not know what to learn,
how to learn.
What would happen if
in this changing world
The only one who’s unchanging
is good or Teach?

VERSE 2:

To teach is to love, to love all you teach.
If Teach does not care for the ones
in her care,
What would happen if, in this
uncaring world,
The one who‘s all head not heart
is good or teach.

VERSE 3:

To teach is to live, to live and re-live.
If Teach isn‘t sure when it‘s right
to be wrong,
What would happen if
in this complex world,
The one who can‘t enjoy the simple joys
is good or Teach.

VERSE 4:

To teach is to lead, to lead, not mis-lead.
If Teach does not know how to follow yet to lead,
What would happen if,
in this competitive world,
The one who‘s given up the fight
is good or Teach

TO TEACH

CHORUS:

As educators, we must be prepared to have high aspirations as well as to genuinely subscribe to what our students, as well as we ourselves, should learn, namely "to lean, to love, to live (and) to lead".

VERSE 1:

In learning to learn, teachers should be Skillful in acquiring and applying knowledge, as well as being Reflective of learning in the context of changing demands.

VERSE 2:

In learning to love, teachers should be fully committed to what they teach or to be more Task - oriented, as well as to adopt a Caring approach towards their students, especially those with learning problems.

VERSE 3:

In learning to live, especially in a complex and stressful world of teaching, teachers should continue to be Enthusiastic by learning to enjoy and contribute to the Humorous side of teaching and learning.

VERSE 4:

In learning to lead, teachers should realise that, while they have often to follow directives, they can and should be Autonomous and Enterprising in preparing their students for a competitive world.

References

Adler, M. (1982). *The Paideia Proposal. An Educational Manifesto.* New York: Macmillan.

Goh, K.S. et al. (1987). Report oin the Ministry of Education 1978. Singapore.

Galton, M. & Moon, B. (Eds) (1994). *Handbook of Teacher Training in Europe. Issues and Trends.* London: David Fulton.

Hands, P. *(1986). The Collins English Dictionary.* 2nd ed. London: Collins.

Hargreaves, A. (1994). *Changing Teachers, Changing Times.*

Holmes Group (1990). *Tomorrow's Schools: Principles for the Design of Professional Development Schools.* East Lansing, MI: The Holmes Group.

Holmes Group (1995). *Tomorrow 's Schools of Education.* East Lansing, I: The Holmes Group.

Murphy, E.C. (1996). *Leadership Intelligence.* New York: John Wiley.

National Commission on Excellence in Education (1983). A *Nation at Risk. The Imperative for Educational Reform.* Washington, D.C.: National Commission on Excellence in Education.

Grimmet, P.P. (1995). Reconceptualising teacher education: Preparing teachers for revitalised schools. In M.F. Wideen & P.P. Grimmett (Eds). *Changing times in teacher education: Restructuring or reconceptualisation?* London: Falmer Press. Pp. 202-225.

Holmes Group (1995). *Tomorrow's Schools of Education.* East Lansing: Michigan State University School of Education.

Houston, W.R., Haberman, M. & Skula, J. (Eds). (1990). *Handbook of Research on Teacher Education.* New York: Macmillan.

Perkins, D. (1992). *Smart Schools.* New York: The Free Press.

Reid, I., Constable, H. & Griffiths, R. (Ed.) ((1994). *Teacher Education Reform: Current Research.* London: Paul Chapman.

Sim, W. K. (1991). *A Review of Teacher Education Research in Five ASEAN Countries: A Synthesis.* Singapore: SEARRAG.

Sim, W.K. (1996). *An Executive Response to Orchestrating Partnerships in Teacher Education.* Universiti Brunei Darussalam.

Sim, W.K. et al.(1973). *A Position Paper on the Evaluation of Science and Mathematics Education in Relation to the Mid-term Review of the Third Malaysia Plan (1 971-1975;. Final Report.Malaysia:* University of *Malaya.* 133pp.

Sim, W.K. & Yip, J.S.K. (1990). Towards the next 25 years. In J.S.K.Yip & W.K. Sim (Eds). *Evolution of Educational Excellence: 25 Years of Education in the Republic of Singapore.* Singapore: Longman.

Sim, W.K. et al. *(1996). A Brief on Teaching Practice at the Sultan Hassanal Bolkiah Institute of Education, Universiti Brunei Darussalam. Practices, Problems and Prospects.* Universiti Brunei Darussalam.

Sizer, T.B. (1984). *Horace's Compromise: The Dilemma of the American High School Today.* Boston: Houghton Mifflin.

Tisher, R.P. & Wideen, M.F. (1990). *Research in Teacher Education: International Perspectives.* London: The Falmer Press.

Wideen, M.F. & Grimmett, P.P. (1995~. *Changing Times in Teacher Education: Restructuring or Reconceptualisation?* London: The Falmer Press.

100

ECONOMIC GROWTH AND THE INTERNATIONAL TRADE IN EDUCATION REFORM [*]

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INTRODUCTION

Issues of trade, health, agriculture, and science have been at the forefront of international discussions. Education has traditionally been confined to domestic problems and, therefore, has generated less extensive exposure at the international level. This is now changing. Education is increasingly a focus of international attention and education reform ideas are frequently traded from one part of the world to another. The reason for this trade is that traditional arguments for investing in education are changing, particularly the arguments for investing in basic or compulsory education. This paper attempts to describe the basis for the trade in education reform by describing the changes in the argumentation over basic education.

First, it summarizes the traditional arguments for making basic education investments, emphasizing that quality is low and the economic returns in both learning and earnings are likely to be higher than from investments in secondary, tertiary or vocational education. Second, the paper summarizes problems with this traditional view -- the fact that expectations for economic performance have changed; that standards for the quality of basic education have changed; and that other levels, specializations, and functions of the education sector are interdependent. If insufficient attention is paid to these linkages, investments in basic education can have a distorting effect.

The paper then summarizes new arguments for making educational investments. These include the need to create: (i) skills necessary to be productive in a new kind of economy; (ii) a distortion-free education system, and (iii) a socially cohesive society through education mechanisms.

Twenty years ago it was common to assume that investment in basic education was a problem limited to low income countries, but this is no longer the case. Expectations for the performance of basic education is a continuum. All countries require new investments and, therefore, share a basic dilemma. Requirements for social cohesion and economic competitiveness raise new expectations for basic education, resulting in a demand for system-wide effectiveness larger than the public resources available. This dilemma commonly leads to a tough questioning of traditional mechanisms of education administration, finance and provision. Since this dilemma is universal, the result has been a massive expansion of international trade in ideas about education reform. This expansion in trade can be expected to affect international relations among states and nations in the field of education well into the next century.

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[*] The opinions are those of the author alone and do not necessarily represent those of the World Bank or any of its affiliated institutions.

Traditional Arguments for Investing in Basic Education

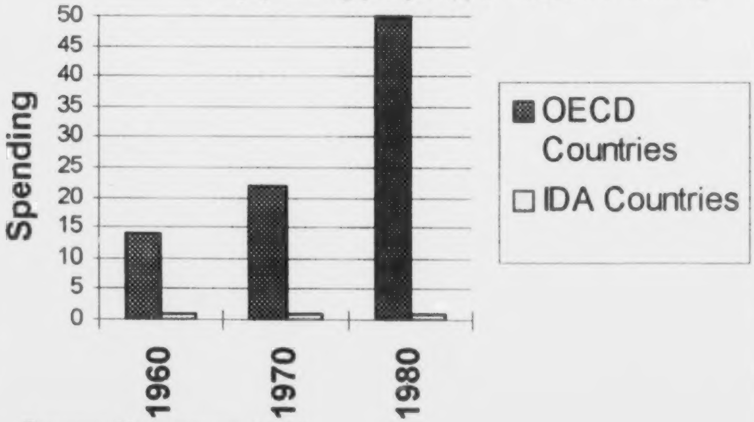
QUALITY IS LOW

The macro-economic problems of the 1970s and 1980s threatened improvements in educational access and quality which many developing countries experienced in the 1960s. The economies were adversely affected by the decline in primary product prices, increases in petroleum prices, and obligations to service public debt. During this period, expenditures/ student rose by over 40 percent (from US$1229 to US$2257) within industrial economies of the Organization for Economic Cooperation and Development (OECD). For middle income countries student expenditures rose by 25 percent (from US$135 to US $180), but in the less developed countries, expenditures/student declined by a third (from US$122 to US$81). There is a traditional gap in spending between low and high income countries, but the gap increased during this period. In 1960 the average OECD country was able to spend about 14 times more per student than the average less developed country (Heyneman, 1990; Heyneman and Fuller, 1989). By 1970 that difference had grown to 22:1, and by 1980 it had grown to 50:1. (Figure 1). These developments reinforce the conclusion that the quality of basic education in the developing countries was very low, and in many respects, it was declining relative to the quality of education in high income countries.[1]

Figure 1

Education Spending GAP

(Spending per year, per student in dollars)



Source: Heyneman, 1990.

INVESTMENTS IN BASIC EDUCATION: HIGHER THAN FOR OTHER LEVELS

Two traditional arguments have been used to support this conclusion, one based on evidence of external efficiency, the other based on evidence of internal efficiency. Since the 1970s it has been argued that the economic rate of return to investments in basic education have been higher than for either secondary or for tertiary education, and that this difference in rates of return by level is particularly characteristic of countries at the lowest income levels. The 1980 World Development Report (World Bank, 1980) for instance, displayed average returns to investments in basic education in the lowest income countries as about 27 percent; with 17 percent return for investments in secondary education; and 12 percent returns for investments in tertiary education. If middle income developing countries were included, the figures were 24 percent; 15 percent and 12 percent. In the higher income countries the comparable figures could not include basic education (which was universal, hence without sufficient variance), but could include returns to investments in secondary (10 percent) and tertiary (9 percent).[ii]

The evidence on internal efficiency was slightly different. Data on different levels of education were insufficient to generalize across countries, but were sufficient to draw some conclusions about the potential productivity of basic education in one country versus another. A summary of that evidence, first published in 1983, can be found below in Figure 2.[iii]

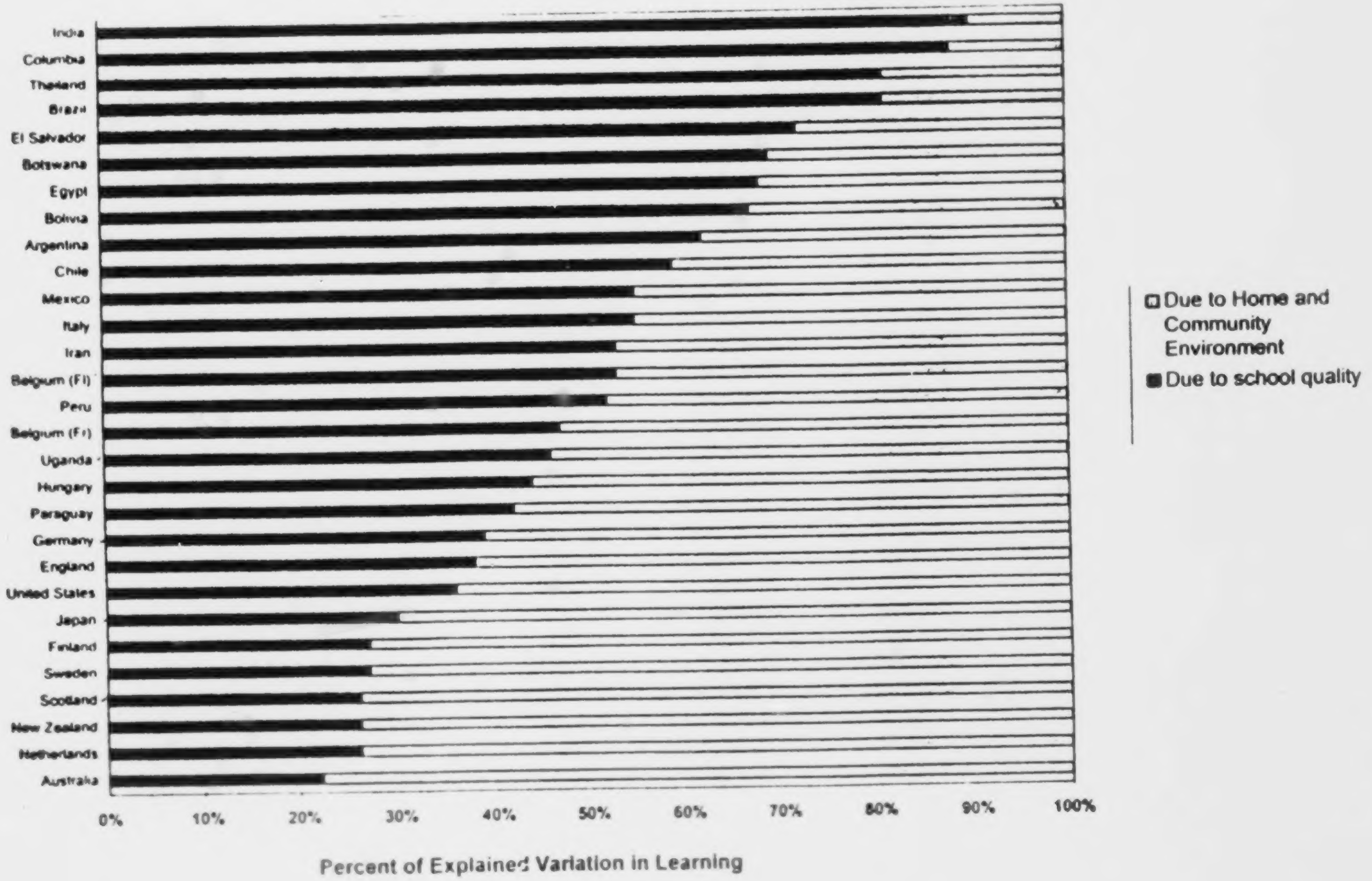
This figure separates influences on academic achievement into two large categories; those over which educational authorities have no control (a child's socio-economic status, gender, ethnicity, home environment) and those over which educational authorities have considerable control (teacher quality, school administration, physical facilities, pedagogical equipment etc.). The aggregate influence of these in-school and out-of-school influences on achievement in science is calculated for 15 developing countries and 14 industrialized countries.

In industrial countries, such as Australia, New Zealand, Scotland, and the Netherlands, the largest influences on science achievement are the out-of-school factors over which educational authorities have no control. In the developing countries it is the opposite. The largest influence on science achievement are the factors over which educational authorities have control. In fact, the relationship appears to be linear -- the wealthier the country the more science achievement can be explained by out-of-school influences; the poorer the country, the more science achievement can be explained by the quality of the school and its teachers.[iv] This implied that the impact of an investment in school quality might be expected to be very different in different parts of the world. In general, the lower the income of the country, the higher the expected impact of that investment. If one were to take an amount of money and invest it anywhere in the world for the purpose of increasing science learning, the investment would have more impact on students in, say India than it would on students in, say Indiana.

These two arguments appeared compelling in the 1980s. They helped to stimulate research on other influences of basic education (health and family planning behavior for instance); they helped to focus attention on the impact of economic problems on the poor; to generate a consensus among countries on basic education-for-all; and to lay the groundwork for the re-ordering of priorities within international agencies of the United Nations, bilateral development assistance agencies, and national governments in many different parts of the world. Basic education was believed incontestably important for reasons of both economic efficiency and social equity.

Figure 2

INFLUENCES ON PRIMARY SCHOOL SCIENCE ACHIEVEMENT



Notes Technical details in "The effect of primary school quality on academic achievement across 29 high and low income countries." American Journal of Sociology, May 1983

Correlation between the influence of school quality national GNP per capita [R=-0.72(P<0.001)]

Source Heyneman and Loxley 1985

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104

Problems with the Traditional View

These traditional arguments have been overtaken by several changes. Expectations for economic performance have shifted since the 1970s making the previous definitions of 'basic' education outdated. New definitions of basic or compulsory education apply not only to low-income countries but to all countries. This has led to a greater understanding of the education sector, and in particular, the degree to which various functions depend upon each other for efficient operation. This, in turn, has led to the realization that a concentration of attention only on one part of education, such as basic education, can have a distortionary effect on other parts. This would suggest that domestic education authorities as well as international agenices would be more effective were they to not decide on educationl priorities by level, but rather after careful reflection about the system at large.

ECONOMIC EXPECTATIONS HAVE CHANGED

In the 1970s and 1980s, it was common to rely on the state for economic growth (World Bank, 1995a, 1995b, 1995c) and on official development assistance for stimulating the state. Today private transfers of investment capital outstrip official development assistance (World Bank, 1996). Moreover, within countries, private investment to less privileged areas may also be more than what is be expected from official governmental sources. Regions in different parts of the world now compete for the same private investment. A computer manufacturing plant might be located in Northern Ireland or southern Italy; a textile plant in Bangalore or Senora; a farm for winter oranges in Kenya or Morocco. What determines the choice of where to invest? Why does investment capital flow to one location over another?

Many factors determine investment confidence, such as rules regarding the repatriation of profits, taxation policy, and risk of property expropriation. Another factor is labor productivity, with more investment likely in areas of higher worker productivity. In East Asia and the Pacific, the growth of GDP/worker increased from 4 percent between 1965 and 1980 to 5 percent between 1980 and 1990, and to almost 8 percent between 1990 and 1993. The growth of GDP/worker actually declined on average in OECD countries, in Sub-Saharan Africa and most dramatically in Europe and Central Asia. It also declined substantially in the Middle East and North Africa, particularly after 1990.

Worker productivity can also be monitored through trends in per capita exports. By this measure the Middle East and North African region has demonstrated consistent increases, from about $40/capita in 1981, to $50 in 1985, to $100 in 1989, and finally to about $120 in 1993. However, the increases in Latin America (from $50/capita in 1985 to $100/capita in 1989; to $200 in 1993) exceed those of the Middle East and North Africa by a large margin. Still, the increases in East Asia (from $50/capita in 1981 to $275/capita in 1993) exceed those of Latin America. Lastly, the increases in the Europe and Central Asia region (from $75/capita in 1981 to over $300/capita in 1993) are the greatest. The lesson is that even though productivity is increasing in general, it is possible for productivity to increase in one region yet fall behind other regions where improvements are occurring at an even faster rate.

How do productivity improvements occur? The work place seems to be profoundly changing. Twenty years ago, when growth was commonly assumed to result from state enterprise, an effective enterprise had a strong system of command, control and supervision. Emphasis was placed on production. Employees were assigned specific routine tasks, and were expected to perform them reliably (Golladay, Berryman, Wolff, and Avins, 1995). Today an effective business operates under different assumptions. Workers are expected to identify and solve problems, learn new skills, personally manage non-routine problems and make decisions which require a broad understanding of the work context.

Figure (3)

CATEGORIES OF SCHOOL QUALITY

	Level of Expenditure on Non-Salary Materials/ Student	Indicator	Product	Example
A	1	1 textbook/class. With some exceptions the teacher has the only available book. Pupils expected to copy the text from the blackboard and memorize.	Rote memorization of unsophisticated and poorly interpreted information.	Uganda Liberia Haiti
B	3:1	1 textbook/student. Each student has access to one book in each subject. Comparatively few prerequisite pedagogical skills.	Major expansion of information and efficiency of presentation; little progress on self-generated skills of learning.	Philippines Peoples Republic of China
C	40:1	Several textbook titles available/student; pupils in lower grades work on locally-designed exercises, teacher picks and chooses from among the best or the most appropriate available materials; requires significant intellectual independence on the part of teachers.	Range of pedagogical programs based upon individual student ability; significant increase in the mastery of cognitive skills.	Malaysia
D	300:1	15 titles to 40 copies/student available in supplementary reading materials in each school in addition to a wide variety of curriculum packages, reference books, maps, dictionaries, film strips, lesson tapes, documentary films and computer-assisted instruction. Significant managerial skills required on the part of teachers at all levels of education.	Self generated habits of learning; ability to investigate new ideas and to recognize strong and weak arguments; major improvement in cognitive creativity; wide exposure to culture as well as science.	Japan USA Sweden

Source: Heyneman and Fuller, 1989

Expectations for competitive agriculture are also shifting. Traditional farmers used local varieties of seeds and implements, and it was common to pass techniques from parent to child. Today, agricultural trade depends on more complex technologies, new seed varieties, changing mixtures of fertilizer, pest control, and irrigation. There are many places in Africa, Asia and the Middle East where winter tomatoes and flowers can be exported. Why does one location have a comparative advantage? One reason is a labor force able to mix inputs in response to changes in weather, soil, crops, quality control and regulations governing the environment.

Changes in standards for manufacturing and agriculture have education prerequisites. The traditional work place required teachers to convey knowledge emphasizing factual information. It did not matter that learning was segmented from meaningful context. The math requirements of traditional agriculture were addition and subtraction and often acquired outside formal education. With new and complex inputs to factor into a 'production equation', other operations became necessary: complex division, multiplication, more complex literacy skills, writing ability, and rudimentary knowledge of chemistry and biology. These are known as 'hard skills'. Also expectations for 'soft skills' are increasing: punctuality, diligence, ability to research unfamiliar concepts, and access new information through both print and electronic means. These changes in the standards for economic competition have triggered changes in the requirements for basic education.

DEFINITION OF BASIC EDUCATION HAS CHANGED

Each country has a unique education system, but there are similarities across countries as well. If one divides education systems according to the quantity of the available goods and services, they generally fall into four categories (Figure 3). In category A, generally in the poorest countries, teaching and learning is characterized by a small number of available textbooks per classroom. The content is written on the blackboard and pupils are expected to copy from the blackboard to a copy book. This 'copy/copy' circumstance is typical of many rural classrooms in sub-Saharan Africa and South Asia. In terms of student learning, the only product which can be expected will be rote memorization of fairly unsophisticated and poorly interpreted information. Even after six years of primary education, a typical student may acquire only a fraction of the skills expected from categories B, C, or D of primary education.

If a school system has access to about three times the level of resources/pupil it may resemble the second of the four levels, Category B. At this level, each pupil generally has access to a textbook in each subject. This constitutes a major expansion of information and efficiency of learning. Nevertheless, the bulk of the teaching is confined to the content of the available textbook, and comparatively undifferentiated by a pupil's style of learning. School systems in Category B are unable to encourage self-generated learning.

Figure 4

Four Basic Stages of Agricultural Productivity and Their Learning Requirements

Former Entrepreneurs' Technology Level	Agricultural Inputs	Minimum Learning Requirements
Level A: Traditional farming techniques passed from parent to child	Local varieties of seeds and implements	Addition and subraction -- not necessarily acquired through formal education
Level B: Intermediate Technology	Small quantities of fertilizer	Addition, subtraction, division, and rudimentary literacty
Level C: Fully improved technology	High-yielding varieties: proven seeds rate of applicaton of seed; fertilizer and pest control per acre.	Multiplication, long division, and other more complex mathematical procedures; readings and writing abilities, and rudimentary knowldege of chemistry and biology
Level D: Full irrigation-based farming	All above inputs: tubewell access during the off-season; and water rates per acre	Mathematics, independent written communication, high reading comprehension, ability to research unfamiliar words and concepts; elementary chemistry, biology, physics, and regular access to information from print and electronic sources.

Source: Heyneman, 1990.

If a system has access to about 40 times the level of per pupil resources as Category A, it may resemble a system in Category C. Every student has access to several textbook titles/subject. Teachers are expected to target content differently to different students, and school systems at level C expect teachers to play different functions in the classroom. Instead of being 'a provider' of text-based information, teachers are expected to be 'a manager' of information drawn from a variety of different sources.

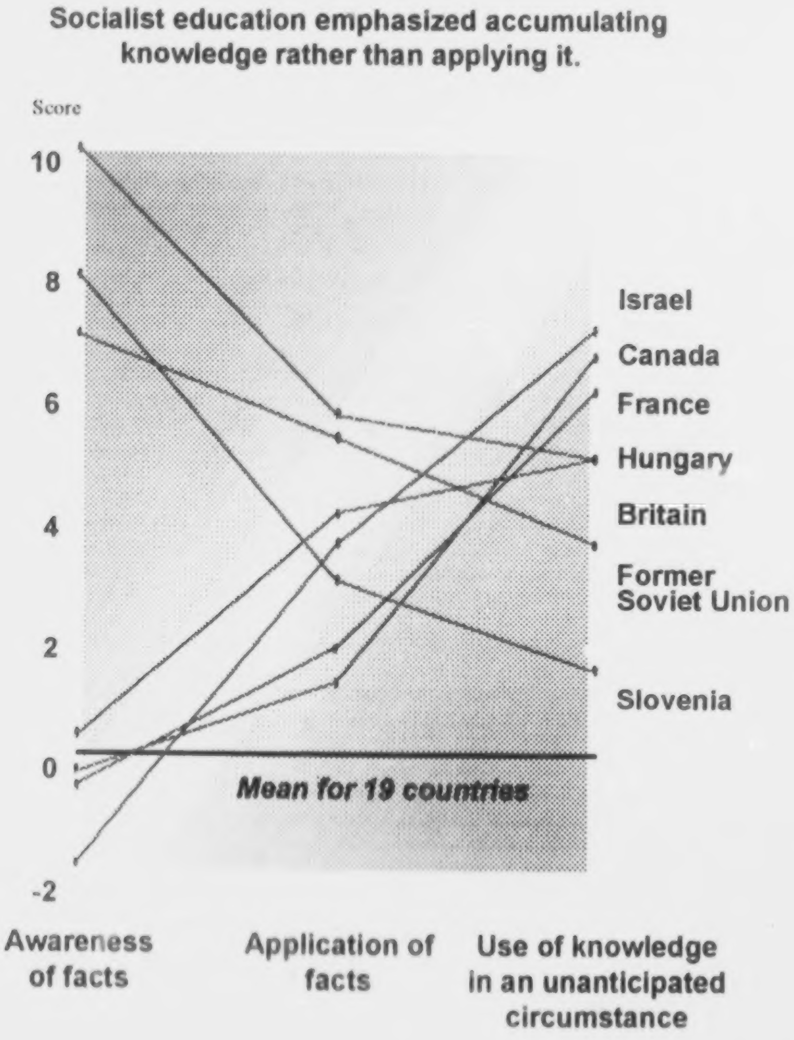
Lastly, if a school system has available 300 times the per/pupil resources as those in Category A, it will have attained the resources typical of many OECD systems. A school system in this category will have a wide variety of sources for print as well as electronic information. The expected product is a latitude of new ideas, self-generated learning, and the differentiation by students of strong and weak argument.

One illustration of how the different categories of school systems relate to the economy can be taken from the example given about agriculture. Productivity in agriculture falls into four different categories, roughly equivalent to the products from the four categories of basic education. These are illustrated below in figure 4.

Two centuries ago, most agriculture was characterized as Level A, where local varieties of seeds and implements were utilized, and techniques were passed down from parent to child within communities. With the introduction of fertilizer, techniques became more complicated and the cognitive requirements for calculating application rates with different water and soil assumptions required a level of basic education in excess of Level A. The same increasing complexity is evident with each new variable: pest control, seed varieties, quality control and environmental regulation, until the ingredients of agricultural productivity reach level D. At Level D the prerequisites for basic education are similarly expanded. The number of years of education is not the principle variable; the principle variable is the increment in the expectations for basic education itself (Bishop, 1989). The higher the level of complexity of economic performance, the greater the demand for a higher level of quality in basic education.

If monetary resources were the sole determinant of more effective learning, then educational strategy would be relatively straight-forward. Results from recent international studies have suggested that resources alone do not determine an education system's effectiveness. One illustration is the difference between school systems in centrally-planned economies and school systems in market economies. Results from the Second International Assessment of Education Progress showed a systematic difference between effective school systems in market economies and effective school systems in centrally-planned economies .The seven most effective school systems at teaching math and science out of the 19 countries in the sample are displayed below (Figure 5). Student performance is divided between awareness of

Figure 5



Source: World Bank, The World Development Report, 1996, p. 125.

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factual information, application of factual information, and the use of information to solve new and unanticipated (i.e., not in the text) problems.[v] Students in the four most effective school systems in the market economies performed lower on the first, higher on the second, and highest on the third. Students in the school systems with centrally-administered economies performed better in the opposite direction: highest on awareness of facts and lowest on solving unanticipated problems. This suggests that school systems in centrally-administered economies demand a different balance of skills than do systems in market economies. School systems in market economies have to prepare students for an uncertain occupational future in which movement across many possible vocations and sectors is normal. School systems in administered economies had a different task. In those circumstances, the economy was planned, technical change was predicable, hence skill training was relatively certain. Curriculum emphasis was placed on the acquisition of information. The problem is that in Central and Eastern Europe and the former Soviet Union, the economic context has significantly shifted. Today, occupational uncertainty resembles that of market economies, and so the challenge to school systems in that region has shifted. Today the challenge is similar to that of school systems in market economies. Their effectiveness in the future will be predicted by whether they can adjust to these new requirements.

But curricular emphases differ from one country to the next even within market economies. Some school systems expect more complicated and varied performance skills than others. One illustration is a comparison of objectives in biology and mathematics between France and countries in the Middle East and North Africa (Figure 6). From an analysis of

Figure 6
Expectations for Performance in Mathematics:
France and the MENA Countries Compared

MENA	*France*
Representation	
	Use of equipment
Performance of routine procedures	Performance of routine procedures
Use of more complex procedures	Use of more complex procedures
	Solving
	Predicting
	Verifying
	Generalizing
Justifying and proving	Justifying and proving
	Description/discussion of problems

Expectations for Performance in Biology:
France and the MENA Countries Compared

MENA	*France*
Simple information	
	Complex information
	Thematic information
	Abstraction, deduction of scientific principles
Use science principles to explain	Use science principles to explain
	Construct and use models
	Design investigations
	Interpret, investigate data

Source: Valverde, 1996

examinations of school systems in the Middle East and North Africa, objectives in math focused on performing routine procedures, justification and proof, whereas in France, the objectives at the same age/grade level also included use of equipment, solutions, predictions, verification, generalization and problem description (Valverde, et.al., 1996). Similar differences were noted in Biology. In France objectives included complex and thematic information, abstraction, deduction of scientific principles, and the use of those principles to explain, construct, and use models, and the design of investigations and the interpretation of data derived from them.

Do wealthier school systems systematically out perform others? From The Third International Math and Science Study it was clear that school systems had access to very different levels of monetary resources but at the same time, they had divergent results in putting resources to use. One illustration can be found below in Figure 7. In Column A, countries are listed by the levels of public expenditures on education/capita.

Figure (7)

Education Expenditures and Mathematics Achievement

Country	-A- Public Expenditure on Education/capita*	-B- Proportion Over the International Median in 8th Grade Math	Ratio A/B
	($)	(%)	
Norway	1111	46	24
USA	1040	45	23
Kuwait	848	3	287
Singapore	724	94	7
England	649	48	14
Japan	602	83	7
Israel	584	56	10
Korea	362	82	4
Hong Kong	309	80	4
Czech	297	70	4
Hungary	272	60	4
Thailand	206	54	4
Iran	183	9	20
Latvia	147	40	3
Lithuania	71	34	2
Romania	55	36	2

* Calculated by multiplying the GNP/capita (in international dollars) by public expenditures on primary and secondary education.

Source: Beaton, A.E.; et.al. 1996.

Column B displays the proportion of 8th grade students performing over the international median for all 41 countries participating in the TIMSS exercise. Column C is the ratio of A/B and therefore is the amount of investment/capita necessary to increase the portion performing over the international median by one percent. Norway, for instance, spent US$1,111/capita and had 46 percent of the students perform over the

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international median. This suggests an investment of US$24 for each one percent of the students performing over the international median. The U.S.A. spent US$1040/capita and had 45 percent of the students over the international median, hence an investment of $23 for each one percent of the students over the international level. Korea, on the other hand, spend $362/capita, had 82 percent of the students over the international median with an investment of $4 for each percent. In Latvia, Lithuania and Romania the efficiency levels were even more dramatic. Those countries were able to invest a much smaller level of resources/capita, but were able to get one percent of their students over the international median for only two or three dollars. Using this criteria, school systems in Latvia, Lithuania and Romania were more efficient than any others in the world-wide sample. This suggests that performance expectations of school systems are shifting. It is no longer sufficient to know that attendance is universal or that school achievements are high. Now it is necessary to have additional information. What are the expectations of the curriculum? How much is being invested for each child? How much of that investment is reaching specific classrooms? Though it may be premature to draw simple judgments about results, it is safe to suggest that the wealthier school systems are not necessarily the most effective (Howson, 1997; Schmidt, et.al. 1997).

EDUCATION LEVELS AND SPECIALIZATIONS: INTER-DEPENDENT

The health sector provides an analogy. Primary health care is incontestably important. Yet primary health care depends upon an efficient system of referrals to increasingly specialized sources of care, research, diagnostic information and professional training. The same holds true for education. No country has developed its economy by investing in only one level of education. In spite of the compelling arguments, investing in basic education at the exclusion of other essential education priorities creates distortions. Low quality higher education affects teaching and administration throughout the system. Unreliable or invalid education statistics prevents understanding of educational progress. An absence of coordination between different levels, or between curriculum content, textual material, pedagogical training and examination content lowers the effectiveness of the education system in general. The main objection to the traditional arguments for basic education is that they ignored these sector interdependencies and created a set of essentially artificial investment priorities.

But what should one look for in a well-functioning education sector? What are the necessary ingredients? This is illustrated by Figure 8 below. Every education sector has three essentiallevels: pre-compulsory, compulsory and post-compulsory. The ideal ingredients of financing and provision may be quite different at each of the levels. Attention to specialized abilities and interests begins at the pre-school level and continues throughout. School systems with more resources are able to deliver greater attention; those with fewer resources, less attention. All systems of education require: schools which respond quickly to local demand; teaching materials obtained on the competitive market; a teaching force characterized by professionalism; descriptive statistics and indicators of internationally-acceptable quality; multi-channel financing which maximizes public desire to make local investments, without abrogating general standards for equal opportunity; and research which is informative. There are other characteristics, however, which are necessary for only certain specialized parts of the sector: professionalized skill training; establishment of exit standards and modern entrance examinations to higher education, and financing for profit-making institutions.

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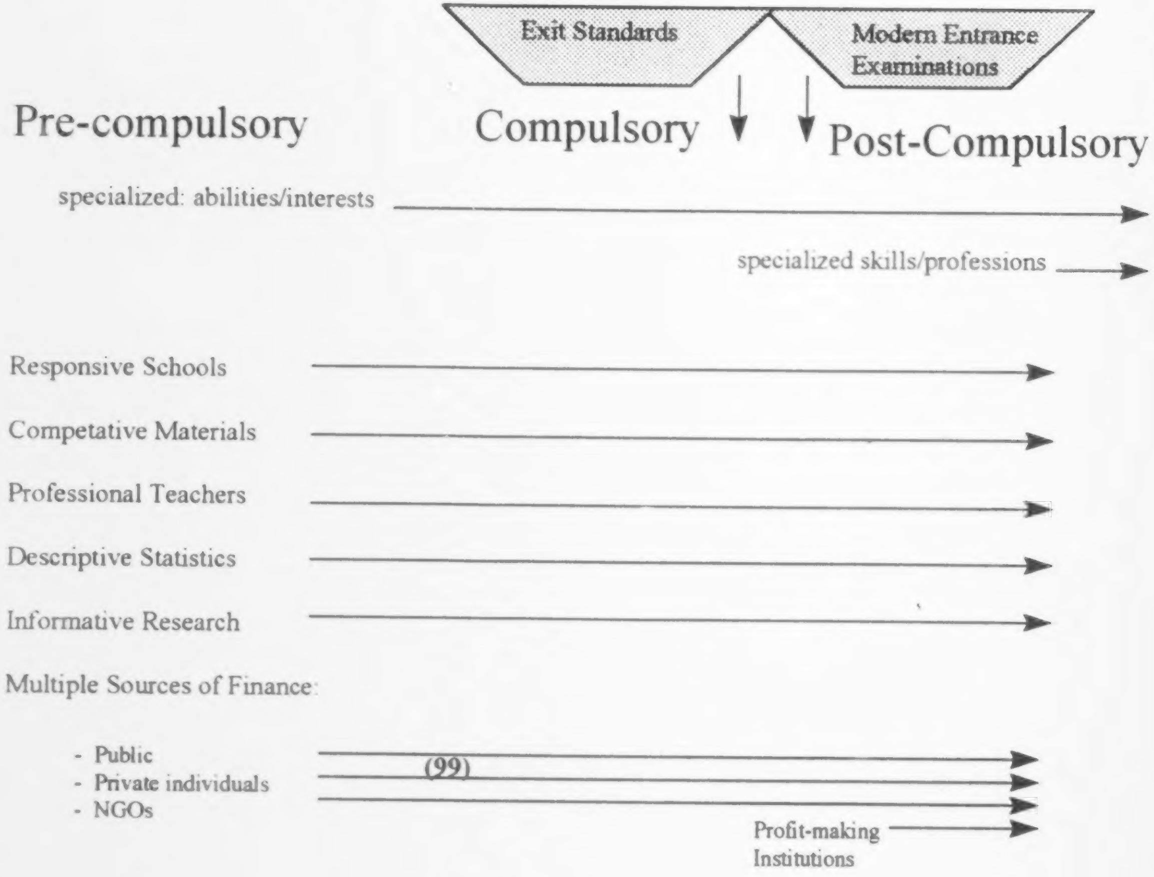
Figure 8

Cohesive Education Sector


Exit Standards
Modern Entrance Examinations
Pre-compulsory
Compulsory
Post-Compulsory
specialized: abilities/interests
specialized skills/professions
Responsive Schools
Competative Materials
Professional Teachers
Descriptive Statistics
Informative Research
Multiple Sources of Finance:
- Public
- Private individuals
- NGOs
(99)
Profit-making Institutions

New Rationales for Investing in Education

If investing by level creates distortions, and if a cohesive education sector is the desired outcome, what then are the reasons for making educational investments? What rationales are most relevant for future economic and social demands? There are three new types of rationales. One is the argument that higher productivity is the result of educational outcomes, but they use new definitions of education and new measures of economic productivity. A second is the argument that education efficiency requires a cohesive education structure and an enabling education policy framework. Last is the rationale that education makes a specific and identifiable contribution to social cohesion and social stability, and that these are necessary for a nation's growth.

PRODUCTIVITY

Measuring individual productivity in the future will differ from the past in several ways. The **definition of educational quality** will become increasingly sophisticated and full of detail (Vari, 1997; Schmidt, McKnight, Raizen, 1997; Schmidt, et.al. 1997a; 1997b; Heyneman, February 1997). Traditional economics recognizes only crude measures of human capital which differentiates individuals on the basis of years of schooling 'exposure'. In the future, it will be necessary to differentiate the marginal productivity of individuals on the basis of differences in intended, delivered and received curriculum; differences in the quality of educational resources brought to bear on the curriculum; and differences among the intended education products. These might include not only earnings functions but specific cognitive skills, successful citizenship behavior and work habits such as diligence, creativity and personal responsibility, family and private endeavors (Bishop, 1989).

Aside from the new definitions of human capital and the new measures for the quality of education, it will also be necessary to focus attention on the **policy environment of the labor market.** This environment significantly affects the productivity of the education sector. Attention in the future will fall into two categories. There will need to be a better balance between public and private functions governing unemployment. A consensus will have to be developed on where public responsibility ends and private responsibility commences. If compensated in an overly generous fashion, unemployment may distort demand for education and allow the education sector to remain impervious to changes in labor force requirements. For reasons of fiscal necessity, public responsibility for unemployment in many cases will decline. Attention will need to be paid to the portability of pension and health insurance. If insurance is linked only to a single employer, changing occupations will be constrained. In general, there needs to be fewer regulations governing labor turnover. To be competitive employers have to hire quickly and efficiently and other staff may have to count on opportunities elsewhere as a matter of normal change. Last is the question of youth policy. In many instances, vocational education is used more as a means of youth control than as a provision of skills. Fear of youth unemployment is real, and the political ramifications of youth misbehavior are disturbing. However, using vocational education as a means to keep youth off the streets is not a solution (Gill and Heyneman, forthcoming, 1997). The solution lies in a creative youth policy which mixes volunteer and community obligations to engender social commitment and in student loans which provides incentive for further educational opportunity.

To be sure, there are numerous cultural and national differences among these policies. Countries are not likely to reach the same view of unemployment compensation simultaneously. The point of mentioning these difficult areas is not to suggest that there is a single solution or a single correct policy. The point is to reiterate the notion that the productivity of education sectors around the world will depend on the efficiency and fluidity of the labor market and its policies.

INTERNAL EFFICIENCY

The list of common areas for improving education sector efficiency can be very lengthy, but it may be useful to mention four immediate areas: descriptive statistics, the production of competitive education materials, a professionalized teacher force, and creative financing and delivery of higher education.

Statistics. The professional quality and variety of education statistics and indicators have been growing in OECD countries, but have remained stagnant or even declining in many of the non-OECD countries (Heyneman, 1993; Puryear, 1995; BICSE, 1993, 1995). OECD countries had agreed on 36 indicators in 1992, 38 in 1993, and 51 in 1994. These included 26 indicators of resources and processes, 13 on context, and 12 on outcomes (OECD, 1994). What reliable indictors are available elsewhere? Figure 9 below provides a list of the 54 indicators available in OECD countries by comparison to counties in the Middle East and North Africa region. About 60 percent of the indicators are either not available or are 'notional,' suggesting that they are not reliable. The countries of the Middle East and North Africa for instance, have no indicators at all of student outcomes, no systematic data on opinions and expectations for education, and only a notional idea of education's labor market outcomes. Africa and Latin America are beginning to organize strategies to combat this problem (Sauvageot, 1992, 1993, 1996, 1997; and McMeekin, 1997). But the challenge is more complex than simply adding new data. Not only is the number of expected indicators increasing, but the expected quality for current descriptive statistics is increasing as well. New professional standards for reliability and validity, now applied in OECD countries, will have to be applied more generally to enrollment and progression rates, to definitions of literacy, and to vocational education which are currently collected but unreliable by these new standards.

Figure 9 About Here

Figure (9a)

O.E.C.D. EDUCATION INDICATORS	
RESOURCES AND PROCESSES	**Available in MENA***
FINANCIAL RESOURCES	
Expenditure on Education Educational expenditure relative to GDP Expenditure of public and private educational institutions Expenditure for educational services per student Allocation of funds by level of education Current and capital expenditure	Yes No No Yes Yes
Sources of educational funds Funds from public and private sources Public funds by level of government Share of education in public spending	No Notional Yes
PARTICIPATION IN EDUCATION	
Participation in formal education Early childhood education Participation in secodary education Transition characteristics from secondary to tertiary education Entry to tertiary education Participation in tertiary education Continuing education and training for adults	Yes Notional Yes Yes Yes Yes No
PROCESSES AND STAFF	
Instructional time Teaching time per subject Hours of instruction	No No
School processes Grouping within classes	No
Human resources Staff employed in education Ratio of students to teaching staff Teaching time Teacher education Teacher compensation Teacher characteristics	Yes Yes No Yes No No
EDUCATIONAL R&D	
Educational R&D personnel Educational R&D expenditure	No No

- **Available to officials in the Ministry of Education only. Countries in the MENA region generally do not publish educational statistics for use by the general public.**

Figure (9b)

O.E.C.D. EDUCATION INDICATORS	
Contexts of education	**Available in MENA**
DEMOGRAPHIC CONTEXT	
Educational attainment of the population	Yes
Gender differences in education	Yes
Youth and population	Yes
SOCIAL AND ECONOMIC CONTEXT	
Labor force participation and education	Yes
Unemployment among youth and adults	Notional
National Income per capita	Yes
OPINIONS AND EXPECTATIONS	
Importance of school subjects	No
Importance of qualities/aptitudes	No
Public confidence in the schools	No
Educational responsibilities of schools	No
Respect for teachers	No
Priorities in school practices	No
Decision-making at school level	No
Results of education	
STUDENT OUTCOMES	
Progress in reading achievement	No
Amount of reading	No
SYSTEM OUTCOMES	
Upper-secondary graduation	Yes
University graduation	Yes
University degrees	Yes
Science and engineering personnel	Yes
LABOR MARKET OUTCOMES	
Unemployment and education	Notional
Education and earnings	No
Educational attainment of workers	Notional
Labor force status for leavers from education	Notional

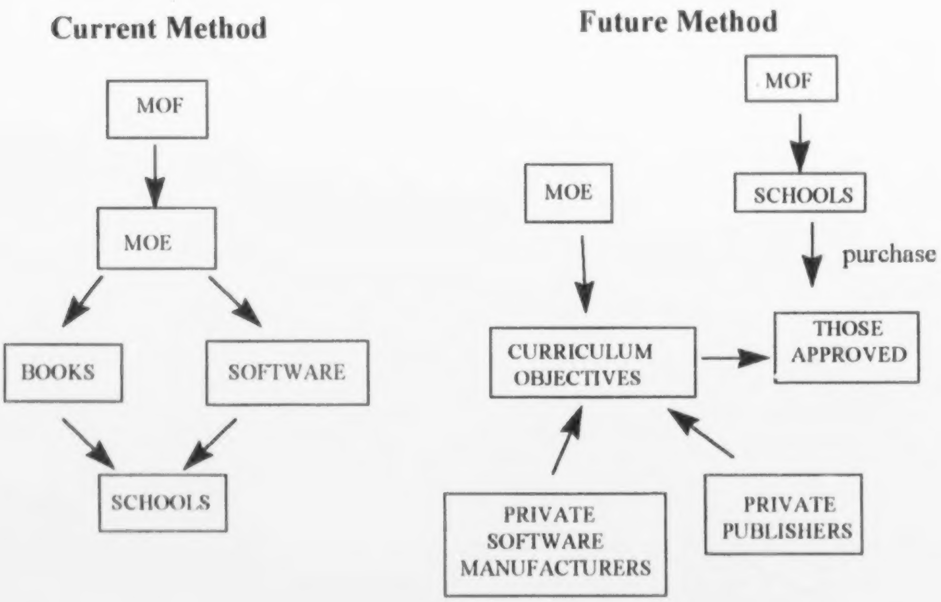
N = 49 Yes = 43 %

Source: Heyneman, forthcoming, 1997c.

Competitive Production of Educational Materials. Like pharmaceuticals and fertilizers, the production of educational print and electronic materials is a large and growing industry. The problem is that the policy assumptions behind educational materials have not kept pace with the industrial and marketing changes. In many countries it is believed that educational materials should be designed, manufactured and delivered through the Ministry of Education. Countries of the former Soviet Union, Eastern and Central Europe, and many in sub-Saharan Africa and other parts of the world held to this assumption a decade ago (Heyneman, Winter 1990; March 1990). When governments get involved in manufacturing products, particularly in instances when those products are widely available in the private sector, the general effect is to lower the quality of the product, raise the (real) price, and inhibit innovation. Ministries of Education in OECD countries generally concentrate on five essential functions common to all ministries of education: (i) setting the objectives for the curriculum; (ii) approving the materials for use in public schools; (iii) financing those materials (as can be afforded); (iv) insuring that students from underprivileged backgrounds have an equality of access; and (v) disseminating the results of innovations and reporting progress to the public at large (Heyneman, April 1994; August 1994). The difference is illustrated below in Figure 10.

Figure 10

EDUCATIONAL MATERIALS PRODUCTION: CURRENT AND FUTURE METHODS


Current Method
MOF
MOE
BOOKS
SOFTWARE
SCHOOLS
Future Method
MOF
MOE
SCHOOLS
purchase
CURRICULUM OBJECTIVES
THOSE APPROVED
PRIVATE SOFTWARE MANUFACTURERS
PRIVATE PUBLISHERS

Source: Heyneman, August 1994.

Teacher Professionalization. For the most part, education expenditures are driven by the salaries paid to teachers. Therefore, the degree to which salaries reflect differences in professional ability determines to a large extent the responsiveness of an education system to pedagogical and curricular reform (Chambers, 1985; Cohn, 1996; Holtman, 1969; Murnane, 1984; Murnane and Olson, 1990; Kenny and Denslow, 1980; Rickman and Parker, 1990; Rumberger, 1987; Southwicke and Gill, 1997; Zarkin, 1985; Doltan, 1990). In most countries the salary structure is determined by a teacher's level of prior or in-service education and by the number of years teaching. Neither has proved to be a robust influence on classroom behavior. The result is that education is perceived by parent and political authorities as impervious to education reform. How can teachers be paid well and fairly but, at the same time, paid in accordance with professional ability?

One suggestion has been to sponsor periodic teacher recertification over a career, but with sufficient salary differences at aeach level to encourage continual in-service preparation . An illustration of this can be found in figure 11 below .

Teachers would first enter the profession as apprentices, paid at a 'Salary Level A'. They would sit for their first licensing exam after a year or two. The exam would consist of four criteria: subject matter knowledge, knowledge of didactics, observed classroom performance, and reported contribution to the profession or the school. After six or seven years in the profession, a teacher might sit for a new and more difficult license examination with the same components but of course changes in the criteria parallel to the changes in the standards for curriculum and pedagogy. Similarly at 11 or 12 years, a third examination could be set with similar requirements. Salaries of the teachers with more advanced licenses would be sufficiently higher to provide the necessary incentives to remain in the profession.

Individual teachers and teacher associations may favor such a system because they could claim, with justification, that salaries reflected performance competence. They could, therefore, justify higher salaries. Educational managers might look favorably on such a system because it provides a mechanism for infusing new curriculum and pedagogy into the teaching force at any stage of a teacher's career simply by changing the content of the certification examinations. Finally, fiscal authorities may favor such a system and more readily agree to the higher salary scales because studying for the examinations can be classified as a private expenditure, and because teachers who continually fail may leave the system. The general public and parent groups may favor such a system because they would have increased confidence that the teachers in their local schools were subject to rigorous standards like other professions.

Many questions remain. Who should grade the examinations and provide school-level observations? The answer could include teacher associations, parent committees, and representatives of the ministry and the academic community. What should be the level of salary differences from one salary category to another? The answer might well be sufficient to provide the necessary incentives. What should be done with those who cannot pass? The answer may be to ask them to leave the teaching system as newer and more highly qualified teachers become available. The point is not to suggest that there is one system for resolving the issue of teacher professionalization. Rather the point is to highlight the overwhelming importance of teaching and teachers in education and to recommend creativity at bringing the public investments in salaries in line with classroom behavior.

Creative Provision and Financing of Higher Education. In the 1960's, higher education enrollment in Western Europe was typically less than ten percent of the age cohort even in Western Europe. Today, enrollment in higher education is above 30 percent in France; 45 percent in the United Kingdom, 49 percent in Belgium, and 60 percent in Finland and in the United States. Moreover, because of political and social priorities, the percentage of higher education enrollment, particularly in North America, can be expected to increase into the next century. With increases in enrollment there has been an increase in the expectations for higher education quality, library and laboratory resources, and the number of curricular offerings and disciplines from which to choose. OECD higher education capital and recurrent expenditures amounted to about $40 billion in 1960, $100 billion in 1980, and $162 billion in 1993 (of which the U.S. accounted for 54 percent). While the price of higher education may differ significantly from one country to another because of cultural differences in the expectations for private responsibilities, the actual (real) cost ($12,000 excluding fees for board and room) is similar across many OECD countries. Low income countries are able to allocate significantly less for pupils in higher education. On the other hand, no country is satisfied with the current quality, the current availability, or the current equity in student participation of higher education (Heyneman, April 1994). They want to raise all three.

In few countries can improvements in access, equity of participation and quality be 100 percent publicly financed. Public financing might have been understandable with less than 10 percent of the age cohort enrolled, but at 30 percent or 60 percent, the logistics and fiscal requirements have put new and unprecedented pressures on public finance. Since scarcity is a universal problem, the kinds of reform choices considered relevant are now international. These come in four groups.

The first group derives from the pressure to diversify the mechanisms for providing higher education -- from public to private, profit-making as well as non-profit-making, international networks of universities, and specialized training institutions. A second group responds to the pressure to diversify financing -- fees for laboratories, targeting of scholarships for the poor, restrictions of student welfare, different tuition in different faculties, income from rental or leasing of property, marketing of university-copyrighted inventions, and contracts, grants, and consultancies. A third group responds to pressures to increase institutional efficiency. This includes close attention to student/faculty ratios, judicious use of new technologies, less expensive contractual arrangements, department-based budgets, and divergence in salaries to reflect market demand for students. The last group responds to the pressures to shift public functions, such as fewer welfare services in lieu of better libraries, and lower transport subsidies in lieu of greater access to computer equipment.

Higher education is also struggling with similar reform issues. They include determining a mechanism by which institutions become accredited and how professionals become licensed; establishing open and fair competition for public research support and for student enrollment; and establishing a salary structure determined at the institution level and according to discipline. Additional issues include: developing a credit system for the completion of courses, shifting to fixed term teaching contracts instead of life-time tenure, making student loans portable from one institution to another, creating other per/student funding formulas, allowing for the operation of universities outside of the country of origin, and setting international recognition of degrees and certificates. At one time these issues may have been considered of local relevance. Today however these issues are universal.

SOCIAL COHESION AND SOCIAL STABILITY

The first two rationales described above, changes in the economy and demand for efficiency, both concern economics, marginal improvement in skill, adaptability to new labor markets, and contribution to economic growth. However, the third rationale for making education investments is not economic but social. It concerns a sense of citizenship, a general acceptance of obligations and responsibilities, and clear individual rights and privileges. This social rationale, in effect, is education's contribution to social cohesion and social stability.

What Dewey refers to as 'education and democracy' (Dewey, 1916) implies the manifest influence of education on personal and individual rationality in contrast to blind obedience which may have characterized individuals without education. Since Dewey's time there has been a variety of claims for education's efficacy and many efforts to empirically demonstrate education's effect on the individual. Lipset (1959) investigated how schools may broaden outlook and increase tolerance and the desire to participate in the political process. Almond and Verba (1963) explored the association between more and better education and a nation's democratic stability. Meyer (1970) and Kamens (1988) investigated the connection between education structures and democratic stability. Inkeles and Smith (1974) worked on the linkage between education and political participation, and Verba, Nie and Kim (1978) on education and an individual orientation toward citizenship. Lastly, Torney-Purta and Schwille (1986) investigated the connection between classroom climate and civic behavior.

These investigations have not been able to isolate the unique characteristics of school systems which contribute to democratic values and stable societies net of other influences. The 1990s have brought a new group of independent countries onto the world scene, all of them anxious to participate in democratic structures. Also, the demand to participate has risen in many regions where one party rule had once been the norm. These events constitute a new phase of nation-building, but this second, 21st Century phase differs from the first in the 1960s in several important respects. Citizens today have access to world information and are able to contribute to that information quicker and simpler than before. On the other hand, new freedoms are accompanied by intense pressures for stability and social cohesion. The question remains: what is the role of education in contributing to this stability? Can education help?

In general, education can make a contribution to social stability when it can offer: (i) equal educational opportunity for all citizens; (ii) a professional consensus around the content of civics and history curriculum; (iii) an ethnically-tolerant classroom atmosphere and pedagogy; and (iv) democratic institutions to adjudicate when there are differences over what to teach.[vi] On the other hand, if tensions in the wider society spill over into the curriculum or management of the schools, education can become an instrument for exacerbating social tensions and threatening social cohesion of the society (Heyneman, 1995c; 1997a; 1997b, forthcoming). How are nations to learn the techniques by which education becomes a contributor rather than a handicap to social cohesion? How are countries to assess the degree to which their school systems are performing as well as school systems in other parts of the world in providing this constructive function? What agreements should be established between school, family, church, mass media, and local political leaders to insure consistency in concept of good citizenship? Where are educational leaders to locate possible ideas on reform in this area? Since social cohesion and social stability constitute universal concerns, improving the manner and effectiveness of education's contribution is rapidly becoming a new rationale for making education investments, hence a new international area of demand for creative reform.

International Trade in Education Reform

Much has changed since the cold war rivalry ended, but one of the most important changes has been with the factors which motivate foreign assistance. This assistance is no longer so easily justified on the grounds of competition between east and west. `Domestic economic priorities, such as unemployment, fiscal deficits, and imbalance in trade, have replaced foreign assistance as a public priority. Between 1992 and 1996, 16 of the 21 donor countries reduced foreign aid as a percentage of GDP (World Bank, 1996, p. 13). The decline has been as vivid within education assistance as well. Between 1989 and 1994 education assistance (in constant prices) from France declined by 13 percent; from the United Kingdom by 16 percent; from the United States by 22 percent; from New Zealand by 31 percent; from Belgium by 44 percent; and from Canada by 56 percent (Bennell and Furlong, 1997, p.7). Moreover, in spite of the considerable consensus on the importance of basic education stemming from the discussion at Jomtien Thailand in 1990, the proportion of bilateral assistance allocated to basic education in many instances has also declined. It declined by 0.5 percent in the United States, four percent in Norway, six percent in Canada, and 13 percent in Australia (Bennell and Furlong, 1997, p. 6). Foreign assistance has decreased in real terms and in many instances the proportion of assistance allocated to basic education has also decreased. However strongly one may feel (including this author) about the importance of basic education, the case has not been sufficiently compelling for the public to reconsider their many other important priorities and problems in order to allocate more international assistance to education.

The voting public in donor countries tends to be older, hence more concerned with issues of pensions, health insurance, and personal safety. Questions have been raised about the effectiveness of development assistance agencies themselves and if they are really helping the poor. Could NGOs deliver assistance more effectively with less bureaucracy? Would NGOs be more free to operate autonomously from governments with records of corruption and human rights problems? There are also the post conflict circumstances of drought and civil war. Voting publics tend to see these situations as more compelling justifications for foreign assistance. Lastly, there are the economic problems of the former Soviet Union which was once a major source of foreign assistance in Africa, Asia, and some parts of Latin America. Official development assistance will continue to be driven by humanitarian motives and justifications, but it is safe to assume that other motivations will play a role as well. Aid will likely be delivered and targeted differently and be lower in magnitude.

As traditional aid declines, what will happen to education? Much of the international cooperation in education has developed under the auspices of international aid. Will the decline in aid spell a similar decline in international cooperation in education?

There is reason to believe that the level of international cooperation in the field of education is on the increase in spite the fact that the level of international aid in the field of education is on the decline (Heyneman, November 1993; 1995b; 1997b). Four Nobel prizes have been awarded dealing with human capital issues.[vii] There have been a flurry of reports on the status of education by international agencies.[viii] There are three education boards established at the U.S. National Academy of Sciences, various congressional committees, and the Carnegie, Spensor, Ford, Ball and Soros Foundations. There is an on-going cooperative effort on African Education, a new European Training Foundation, major new initiates in the Asia/Pacific Economic Conference (APEC), the

Inter-American Dialogue Foundation, the Inter-American Development and the Asia Development Banks, and in the Dutch Ministry of Education, the National Foundation for Educational Research (NFER).

Within the National Center for Education Statistics, spending on international studies has risen from US$165,000 in 1988 to US$10 million in fiscal year 1993. Today there are more countries participating in IEA studies than at any other previous time over the past thirty years, and the majority are classified as developing countries. Projects include studies of literacy, math, science and civics education. Comparative teaching techniques are now analyzed internationally by using digitized video tapes. Curriculum emphases and objectives are broken down to increasingly specific and educationally meaningful components. Demand is high for joining OECD's cooperative project on education indicators, including demand from countries with only loose affiliation with OECD itself. Other trading interests including, NAFTA, APEC, EU, and Mercosur have initiated comparative studies of labor markets and educational quality. What is behind these new demands for information? And why is it that at the same time as humanitarian-based assistance in on the decline, international cooperation in education is on the rise?

What is being traded back and forth? Who is doing this trading? Will this trade continue? A few words on its cause, content, participants, prospects, and implications of the international trade on education policy reform.

CAUSES

The explanations are not identical in every part of the world, nor are the explanations permanent. Marshaling education evidence which may lead to a more competitive labor force and, therefore, a trade advantage may be the primary motivation in the Americas and in Europe; in Asia it is more for social cohesion, and in the Former Soviet Union it is for social and economic integration. In many regions education is rising on the political agenda, and is a topic of intense debate. Frequently debates center on language of instruction, history, widening access, improving quality, and expanding equity. Ideas on policy reform are in high demand because of the wide recognition of both poor and rich countries that public resources are inadequate.

PARTICIPANTS

In the 1960s the central education representatives were often the sole representatives. Today, however, education is frequently a decentralized activity. Budgets and policy priorities are driven by local authorities. This is particularly evident in federal systems where local states and school districts increasingly finance and conduct evaluations, research projects and policy reviews on their own initiative. Local or municipal initiative is often a leading force in centralized education systems as well, and are being driven not only by educational authorities but by local business and community groups, industries, and non-governmental organizations. In higher education and in private education where policy reform decisions are increasingly the responsibility of individual institutions, these institutions are involved in international relations on their own. Educational software companies, publishers, training firms are increasingly active and are demanding new and current information on the size of the educational markets in many different countries. Taken together, these new categories of participants have deeply affected the 'vision' and expressed interests of the traditional central education authorities.

CONTENT

Ministries of education are increasingly preoccupied by the demand for (i) good ideas on policy reforms, (ii) relevant and reliable statistical data, (iii) state-of-the-art analytic techniques, and (iv) sources of experienced advice on these areas. They are motivated in this regard, not so much by a shift in philosophy, but rather by the requests from local and non-governmental education interests. The ideas of central and/or federal authorities may indeed differ from one part of the world to another about what constitutes appropriate reform, but they share one important characteristic, the requirement that they respond to domestic demand for international information.

PROSPECTS AND IMPLICATIONS

As long as there is a scarcity of public resources to finance public education demands, there will be an international trade in ideas for education reform. The demand can, therefore, be expected to increase well into the next century. Moreover the demand can also be expected to continue the process for a shift away from the traditional lines of international relations that tend to focus on north and south interests; centrally-planned and market-driven economies; geographical neighbors, linguistic blocks, and ex-colonial and historical connections. These traditional linkages may be replaced gradually with interests of partners or competitors in trade; and with interests in similar education issues, such as higher education diversity, experience with voucher and loan schemes and the like.

The implications of this trade may well be profound. The kinds of questions emerging from developing countries may shift from monetary assistance to new ideas for policy reforms. This, in turn, will affect the functions of international agencies with education interests which will have to respond to these demands just as the national agencies have had to respond to local demands. The changes in question may influence the types of functions and mandates of international agencies, and the kinds of staffing appropriate to fill these new functions. Similar pressures can be expected to be felt by bilateral development assistance agencies with educational interests. With the general decline in foreign assistance, the type and justification of that assistance may have to reflect domestic education demands instead of isolated humanitarian purposes. This may require those agencies dealing with foreign aid to develop closer links with the domestic education ministries and to acquire staff familiar with domestic education policy experience.

Summary

The decline in foreign assistance for education can be considered a tragedy. On the other hand, the elevation of education in domestic debate and the increase in trade of professional ideas on education reform might be considered a benefit. The adjustment to these new functions on the part of development assistance agencies and international agencies familiar with the traditional rationales for education investment will be difficult, however, in the end, their successful adjustment will be good for the field of education.

Notes

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[i] Is it inevitable that low income countries invest in education proportional to their low income status? If a country invests in education at a higher rate than others at similar levels of GDP/capita, would the effect be noticeable? Experience over the last three decades suggests that low income countries which invest in education at higher than 'expected' levels have higher rates of economic growth. This seems to be a significant explanation for the recent economic performance in East Asia (World Bank, 1993).

[ii] Rates of return data, methods of analysis and common interpretations have been questioned by Bennell, 1995; 1996a; 1996b; 1996c; Curtin, 1996a; 1996b; Colclough, 1996; Hammer, 1996; Birdsall, forthcoming, 1997; and Heyneman, 1995a.

[iii] These analyses were conducted originally by using ordinary least squares methods or regression analysis. Later some argued that multi-level analytic techniques would be able to capture new types of influences on learning, hence change results (Heyneman, November 1989; Riddell, 1989). In the last decade there have been 16 multi-level analyses, each limited to single country example (Riddell, 1997, p. 198). On the other hand, two decades of experience using large data sets to analyze questions of school and home effects on academic achievement suggest that the results differ from one country to another; from one subject to another; and by gender, age and grade level (Heyneman, January/February 1997).

[iv] The correlation between the influence of the school quality and national GNP/capita is $r = -0.72$ ($p<.001$) (Heyneman and Loxley, 1983a).

[v] The World Bank, The World Development Report, 1996: From Plan to Market. New York: Oxford University Press, 1966, pp 124 -5.

[vi] The provision of an equality of opportunity is important in both public perception and in measured results (Heyneman, 1980; 1982; Heyneman and Loxley, 1983b). One of the most critical mechanisms of providing both is through a modern system of examinations to higher education which is perceived by the public to be fair, accurate, affordable (Heyneman, 1979; 1983; 1987; Heyneman & Ransom, 1990; Plomp & Voogt, 1994).

[vii] Edward Dennison, Jan Tinbergen, T.W. Schultz, and Gary Becker.

[viii][viii] UNDP, 1990; ILO, 1989; International Development Research Centre (IDRC) and Canadian International Development Agency (CIDA), 1982; Inter-Agency Commission, World Conference on Education for All (UNDP, UNESCO, World Bank), 1990; Inter-Agency Commission and United Nations Children's Fund, June 1990; Hawes and Coomb, 1986; United Nations Children's Fund, 1992; Carnoy, 1992; Thorsby and

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Gannicott, 1990; World Bank. 1988; World Bank, 1990; World Bank, 1991; Singapore Ministry of Education; 1987.

References

Almond, G.A.; Verba, S. 1963. *The Civic Culture*. Princeton, Princeton University Press.

Beaton, A.E.; et.al. 1996. *Mathematics Achievement in the Middle School Years: IEA's Third International Mathematics and Science Study (TIMSS)*. Chestnut Hill, MA, TIMSS International Study Center, Boston College.

Bennell, P. 1995. *Rates of Return to Education in Asia: A Review of the Evidence*. Brighton, U.K, University of Sussex, Institute of Development Studies.

Bennell, P. 1996a. Rates of Return to Education: Does the Conventional Pattern Prevail in Sub-Saharan Africa. *World Development*, (Oxford, U.K.) vol. 24, no. 1, pp. 183-99.

Bennell, P. 1996b. Using and Abusing Rates of Return: A Critique of the World Bank's 1995 Education Sector Review. *International Journal of Educational Development*, (Oxford, U.K.) vol. 16, no. 3, pp. 235-49.

Bennell, P. 1996c. Privatization, Choice and Competition: The World Bank's Reform Agenda for Vocatonal Education an dTraining in Sub-Saharan Africa. *Journal of International Development*. (Washington, DC) vol. 8, no. 13, pp. 467-87.

Bennell, P.; Furlong, D. March 1997. *Has Jomtien Made Any Difference? Trends in Donor Funding for Education and Basic Education Since the Late 1980s*. Brighton, U.K., University of Sussex, Institute for Development Studies.

Birdsall, N. (forthcoming) 1997. Public Spending on Higher Education in Developing Countries: Too Much or Too Little? *Economics of Education Review*, vol.15, no. 4

Bishop, J.H. 1989. Is the Test Score Decline Responsible for the Productivity Growth Decline? *American Economic Review*, (Cambridge, MA) vol. 79, pp 178-97.

Board on International Comparative Studies in Education. 1993. *A Collaborative Agenda for Improving International Comparative Studies in Education*. Washington D.C., National Research Council.

Board on International Comparative Studies in Education. 1995. *Worldwide Education Statistics: Enhancing UNESCO's Role*. Washington D.C., National Academy Press.

Carnoy, M. 1992. *The Case for Investing in Basic Education*. New York, UNICEF.

Chambers, J.G. 1985. Patterns of Compensation of Public and Private School Teachers, *Economics of Education Review*. (Cambridge, MA) vol. 4, pp. 291-310.

Cohn, E. 1996. Methods of teacher remuneration: Merit Pay and Career Ladders. In: Becker, W.E.; Baumol, W.J., eds. *Assessing Educational Practices: The Contribution of Economics*. Cambridge, MA, MIT, pp. 209-238.

Colclough, C. 1996. Education and the Market: Which Parts of the Neo-Liberal Solution are Correct? *World Development* (Oxford, U.K.) vol. 24, no. 4, pp. 589-610.

Curtin, T.R.C. 1996a. Fallacy and Fraud in Human Capital Theory. *Papua New Guinea Journal of Education*, vol. 11, no. 2, pp. 66-78.

Curtin, T.R.C. 1996b. Project Appraisal and Human Capital Theory. *Social Investment* vol.11, no. 2, pp. 73-78.

Dewey, J. 1916. *Democracy and Education*. New York, Dutton.

Dolton, P. J. 1990. The Economics of UK Teacher Supply: The Graduate's Decision. *Economics Journal*, vol. 100, pp. 91-104.

Gill, I.; Heyneman, S.P. (forthcoming) 1997. Egypt: Reforming vocational Education and Training to Meet Private Sector Skill Demands. In: Gill, I; Fluitman, F.; Dar, A. eds. *Constraints in Reform of Vocational Education and Training*. Washington, DC, World Bank and International Labor Organization.

Golladay, F.; Berryman, S.; Wolff, L.; Avins, J. 1995. *A Human Capital Strategy for Competing World Markets.* Washington D.C., World Bank, Technical Department, Middle East and North Africa Region.

Hammer, J. October 1996. *The Public Economics of Education*. World Bank: Policy Research Department, (mimeographed).

Heyneman, S.P. 1979. Why Impoverished Children Do Well in Ugandan Schools. *Comparative Education* (Oxford, U.K.) vol.15, no. 2, pp. 175-185.

__________. 1980. Planning the Equality of Educational Opportunity Between Regions. In: Carron, G.; Chau, Y.N., ed. *Regional Disparities in Educational Development: A Controversial Issue*. Paris, UNESCO, International Institute for Educational Planning.

__________. 1982. Resource Availabilty, Equality, and Educational Opportunity Among Nations. In: Anderson, L.; Windham, D. eds. *Education and New Issues in the Analysis and Planning of Post-Colonial Societies.* Lexington, MA, Lexington Books.

__________. 1983. Education During a Period of Austerity: Uganda, 1971-1981. *Comparative Education Review* (Chicago, IL) vol. 27, no. 3, pp. 403-413.

__________. 1987. Uses of Examinations in Developing Countries: Selection, Research and Education Sector Management. *International Journal of Educational Development* (Oxford, U.K.) vol.7, no. 4, pp. 251-263.

__________. November 1989. Multi-Level Methods for Analyzing School Effects in Developing Countries. *Comparative Education Review* (Chicago, IL), pp. 498-504.

__________. Winter 1990. Protection of the Textbook Industry in Developing Countires,: In the Public Interest? *Book Research Quarterly*, pp. 3-11.

__________. March 1990. The Textbook Industry in Developing Countries. *Finance And Development*, pp. 28-9.

__________. 1990. Economic Crisis and the Quality of Education. *International Journal of Educational Development.* vol. 10, no. 2/3, p. 115-129.

__________. 1993. Educational Quality and the Crisis of Educational Research. *International Review of Education.* vol.39, no.6, pp. 511-517.

__________. November 1993. Comparative Education: Issues of Quantity, Quality and Source. *Comparative Education Review* (Chicago, IL) vol. 37, pp. 372-388.

__________. April 1994. *Issues of Education Finance and Management in ECA and OECD Countries.* Washington D.C., World Bank, HRO Working Paper # 26.

__________. August 1994. *Education in the Europe and Central Asia Region: Policies of Adjustment and Excellence.* Washington DC, World Bank, Office of the Vice President Europe and Central Asia Region, #IPD - 145.

__________. 1995a. Economics of Education: Disappointments and Potential. *Prospects* (Paris, France) XXV no. 4, pp. 559-583.

__________. 1995b. International Education Cooperation in the Next Century. *CIES Newsletter* no. 109.

__________. 1995c. Thoughts on Social Stabilization. In: CIVITAS, ed. *Strengthening Citizenship and Civic Education, East and West.* Washington D.C., United States Information Agency, pp. 70-74.

__________. January/February 1997. Jim Coleman: A Personal Story. *Educational Researcher*. 2C, no. 1, pp. 28-30.

__________. February 1997. *Using TIMSS in a World of Change*. Paper presented to the National Academy of Sciences, Washington D.C.(mimeographed).

__________. (forthcoming)1997a. Educational Choice in Eastern Europe and the Former Soviet Union. *Education Economics.*

__________. (forthcoming) 1997b. Educational Cooperation Between Nations in the Next Century. *Festschrift for Professor Wolfgang Mitter.* Frankfurt, Deutsches Institut Fur Internationale Paedagogische Forschung.

__________. (forthcoming) 1997c. The Quality of Education in the Middle East and North Africa. *International Journal of Educational Development.*

Heyneman, S.P.; Fuller, B. 1989. Third World School Quality: Current Collapse, Future Potential. *Educational Researcher* (Washington, DC) vol.18, no. 2, pp. 12-19.

Heyneman, S.P.; Loxley, W. 1983a. The Distribution of Primary School Quality Within High and Low-Income Countries. *Comparative Education Review.* (Chicago, IL) vol. 27, no.1.

Heyneman, S.P.; Loxley, W. 1983b. The Effect of Primary School Quality on Academic Achievement across Twenty-Nine High- and Low-Income Countries. *American Journal of Sociology* vol.88, no. 6, pp. 1162-1194.

Heyneman, S.P.; Ransom, A. 1990. Using Examinations to Improve the Quality of Education. *Education Policy.* vol. 4, no. 3, pp. 177-192.

Holtman, A. G. 1969. Teacher Salaries and the economic benefits of search. *Journal of Human Resources.* (Madison, WI) vol. 4, pp. 93-103.

Howson, G. 1997. *Mathematics Textbooks: A Comparative Study of Grade 8 Texts.* TIMSS Monograph Series number 3, Vancouver, British Columbia: Pacific Educational Press.

Hawes, H.; Coomb, T. eds. 1986. *Education Priorities and Aid Responses in Sub-Saharan Africa.* London, Overseas Development Administration.

International Development Research Centre (IDRC); Canadian International Development Agency (CIDA). 1982. Financing Educational Development. Ottawa, IDRC.

Inkeles, A.; Smith, D.H. 1974. *Becoming Modern.* Cambridge, MA, Harvard University Press.

Inter-Agency Commission, World Conference on Education for All (UNDP, UNESCO, World Bank) 1990. Final Report, World Conference on Education for All: Meeting Basic Learning Needs, held at Jomtien, Thailand. New York, Inter-Agency Commision.

International Labor Office. 1989. *International Labour Report, 1989.* Geneva, ILO.

Kamens, D. 1988. Education and Democracy: A Comparative Institutional Analysis. *Sociology of Education,*vol.61, pp. 114-127.

Kenny, L. W.; Denslow, D.A. 1980. Compensating differentials in teachers' salaries. *Journal of Urban Economics,* vol. 7, pp. 198-207.

Lipset, S.M. 1959. Some Social Prerequisites of Democracy: Economic Development and Political Legitimacy. *American Political Science Review.* 53, pp. 69-105.

McMeeken, R.W. May 1997. Education Statistics in Latin America and the Caribbean. Santiago: UNESCO/Ford Foundation, (mimeographed).

Meyer, J.W. 1970. The Charter: Conditions of Diffuse Socialization in Schools. In: Scott, W.R., ed. *Social Processes and Social Structure*. New York, Hold, Reinhard and Winston, pp. 564-578.

Ministry of Education in Singapore, 1987. *Towards Excellence in Schools.* Singapore, Ministry of Education.

Murnane, R.J. 1984. Selection and survival in the teacher labor market. *Review of Economics and Statistics.* LXVI pp. 513-18.

Murnane, R.J.; Olsen, R.J. 1990. Effects of salaries and opportunity costs on duration in teaching: Evidence from North Carolina. *Journal of Human Resources.* (Madison, WI) vol. 25, pp. 106-124.

OECD. 1994. *Education at a Glance.* OECD Indicators of Education Systems. Paris, OECD.

Plomp, T.; Voogt, J. 1994. *Entrance to Higher Education: Problems and Dilemmas with the Transition from Secondary to Tertiary Education in the Russian Federation.* Enschede: University of Twente.

Puryear, J. 1995. International Education Statistics and Research: Status and Problems. *International Journal of Education Development.* vol.15, no. 1, pp. 79-91.

Rickman, B. D.; Parker, C.D. 1990. Alternative Wages and teacher mobility : A Human Capital Approach. *Economics of Education Review.* (Cambridge, MA) vol. 9, pp. 73-9.

Riddell, A.R. 1989. An Alternative Approach to the Study of School Effectiveness in Third World Countries. *Comparative Education Review* (Oxford, U.K) vol. 33, no. 4, pp. 481-98.

Riddell, A.R. 1997. Assessing Designs for School Effectiveness Research and School Improvement in Developing Countries. *Comparative Education Review* (Chicago, IL) vol. 41, no. 2, pp. 178-206.

Rumberger, R.W. 1987. The Impact of salary differentials on teacher shortages and turnover: The Case of mathematics and science teachers. *Economics of Education Review* (Cambridge, MA) vol. 6, p. 389-399

Sauvageot, C. 1992. *Primary Education in Lesotho: Indicators.* Paris: UNESCO International Institute of Educational Planning.

__________. 1993. *L'Enseignement Fondamental au Mali: Indicateurs.* Paris: UNESCO International Institute of Educational Planning.

__________. 1996. *Development of Indicators for Educational Planning in Eastern and Southern Africa.* Paris: UNESCO International Institute of Educational Planning.

__________. 1997. *Indicators for Educational Planning: A Practical Guide.* Paris: UNESCO International Institute of Educational Planning, January, 1997.

Schmidt, W.H., et.al. 1997a. *Characterizing Pedagogical Flow: An Investigation of Mathematics and Science Teaching in Six Countries.* Hingham MA, Kluwer Academic Publishers.

Schmidt, W.H., et.al. 1997b. *Many Visions Many Aims Volume I A Cross National Exploration of Curricular Intentions in School Mathematics.* Hingham MA, Kluwer Academic Publishers.

Schmidt, W.H.; McKnight, C.C.; Raizen, S.A. 1997. *A Splintered Vision: An Analysis of U. S. Mathematics and Science Curricula.* Hingham MA, Kluwer Academic Publishers.

Singapore Ministry of Education. 1987. *Towards Excellence in Schools.* Singapore, Ministry of Education.

Southwick, Jr., L.; Gill, I.S. 1997. Unified Salary Schedule and Student SAT Scores: Adverse Effects of Advers Selection in the market for Secondary School Teachers. *Economics of Education Review.* (Cambridge, MA) vol.16, no. 2, pp. 143-153.

Thorsby, C.D.; Gannicott, K. 1990. *The Quality of Education in the South Pacific.* Canberra, National Centre for Development Studies.

Torney-Purta, J.; Schwille, J. 1986. Civic Values Learned in School: Policy and Practice in Industrialized Nations. *Comparative Education Review* (Chicago, IL) vol. 30, no. 1, pp. 30-49.

UNESCO. 1991. *World Education Report, 1991.* Paris, UNESCO.

United Nations Children's Fund. June 1990. *Protecting the World's Children: A Call for Action.* WHO,UNICEF, World Bank, United Nations Development Program, Rockefeller Foundation Primary Education Policy Papers. New York, Rockefeller Foundation.

United Nations Children's Fund. 1992. *State of the World's Children.* New York, Unicef.

United Nations Development Program. 1990. *Human Development Report.* New York, Oxford University Press.

Valverde, G.A.; Schmidt W.H.; Bianchi, L.J. July 1996. *An Explatory Analysis of the Content and Expectation for Student Performance in Selected Mathematics and Biology School-Leaving Examinations from the Middle East and North Africa Region.* Washington, D.C., World Bank, (mimeographed).

Vari, P. ed. 1997. *Are We Similar in Math and Science? A Study of Grade 8 in Nine Central And Eastern European Countries.* Budapest, Orsazgos Kozoktatasi Inteznet.

Verba, S.; Nie, N.; Kim, J. 1978. *Participation and Political Equality: A Seven Nation Comparison.* London, Cambridge University Press.

World Bank. 1980. *World Development Report 1980: Adjustment and Growth in the 1980s.* Washington D.C., World Bank.

World Bank. 1988. *Education in Sub-Saharan Africa: Policies for Adjustment, Revitalization and Expansion.* Washington, DC, World Bank.

World Bank. 1990. *Primary Education Policy Paper.* Washington, DC, World Bank.

World Bank. 1991. *Vocational and Technical Education and Training Policy Paper.* Washington, DC, World Bank.

World Bank. 1993. *The East Asian Miracle: Economic Growth and Public Policy.* New York, Oxford University Press, Inc.

World Bank. 1995a. *Claiming the Future: Choosing Prosperity in the Middle East and North Africa.* Washington D.C., World Bank.

World Bank. 1995b. *Regional Perspectives on the World Development Report: Will Arab Workers Prosper or Be Left Out in the 21st Century?* Washington D.C., World Bank.

World Bank. 1995c. *World Development Report 1995: Workers in an Integrating World* Washington D.C., World Bank.

World Bank. 1996. *Global Economic Prospects and the Developing Countries.* Washington D.C., World Bank.

Zarkin, G. A. 1985. Occupational Choice: An application to the market for public school teachers. *Quarterly Journal of Economics*, pp. 409-446.

REPORT AND DISCUSSION OF THE INTERNATIONAL BUREAU OF EDUCATION 1996 CONFERENCE ON EDUCATION.

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1. I wish, first, to convey to you all, the greetings of Mr. Federico Mayor, Director-General of UNESCO, who asked me to warmly congratulate the authorities of the Jordanian Government and the ICET for the splendid organization of this forty-third World Assembly and to express his most sincere wishes for its success. The Director-General follows the activities of ICET with much interest and, whenever an opportunity is offered for him to do so, reiterates the support of UNESCO for the achievement of ICET's aims.

2. As you all know, just about two months ago, the International Bureau of Education of UNESCO organized the forty-fifth session of the International Conference on Education. On the occasion of the theme discussed by Ministers of Education and representatives of intergovernmental and non-governmental organizations was the role of teachers in a changing world. The choice of this theme responded to various requests. This year is exceptional from the symbolic viewpoint as, on one hand, we celebrate the thirtieth anniversary of the ILO-UNESCO Recommendation concerning the status of teachers and, on the other hand, we commemorate the birth of four famous educators: two hundred and fifty years ago for Pestalozzi, and a hundred years ago for Jean Praget, Clestun Freinet and Leu Vygotsky. But beyond these important symbolic aspects, the debate on the role of teachers meets a need, felt in all regions of the world, for the re-evaluation of their function in this period of deep social economic, political and cultural transformations. This need has become obvious not only through the important number of ministers and representatives of intergovernmental and non-governmental organizations who participated in the conference, but particularly through the quality and intensity of the debates that took place, both in the phase of preparing for the meeting and during the Conference itself.

3. The discussions were intensive and final agreements were not easily reached. However, the outcomes have been very much appreciated and we now have a new and important instrument of international consensus guiding the action of all those concerned with the strengthening of the teachers' role in the process of educational transformation. This instrument has two main components: *a Declaration,* approved by acclamation by all the delegates who participated in the Conference and which expresses the political will of the Ministers of Education to design and implement efficient strategies of action, and a set of nine *recommendations* which reflect the situations and problems that these strategies must tackle. These recommendations are based upon two fundamental principles: the first one advocates that today more than ever, educational reforms must reach the school and the classroom and that, consequently, the teacher is the key actor in the process of educational transformation, the second principle recognizes the

necessity of designing integrated policies for teachers, which go beyond partial approaches based on the idea that it is possible to change the whole situation by tackling only one aspect of the problem. The mine recommendations approved by the conference must be considered as a package and-as you can see from their respective titles- they constitute a solid programme of action:

(i) recruitment of teachers: attracting the most competent young people to teaching;
(ii) pre-service training: a better linkage between pre-service training and the demands of an innovatory professional activity;
(iii) in-service training: both a right and a duty for all educational personnel;
(iv) the involvement of teachers and other agents in the process of transforming education autonomy and responsibility;
(v) teachers and their partners in the educational process: education as a responsibility for all;
(vi) new information and communication technologies: serving to improve the quality of education for all, professionalization as a strategy for improving the status and working conditions of teachers;
(vii) solidarity with teachers working in difficult situations, and;
(viii) regional and international co-operation: an instrument to promote teacher mobility and competence.

4. The final agreement of the Conference, as is true for all agreements of this type, reflects the outcome, but not the process of the discussion which took place before it was reached. This process had been very long, the debates very intensive and it seems useful to me, in this assembly of educators, to be able to share with you some of the aspects which, from my point of view, seem most relevant.

The wearing down of the traditional approach concerning teachers

5. First, it seems important to me to note that the preparation of the ICE and its outcomes show that at least three traditional standpoints concerning teachers have begun to lose their importance. First, the position according to which the work of educators was given a merely rhetorical importance. In this regard, we have all witnessed during the last decades –particularly in political speeches- the dissociation that existed between the recognition of the teachers' importance and the absence of any real measures taken in their favour, whether it be from the financial point of view, from that of the level of involvement in management of the improvement of the initial of in-service training processes. Many analyses indicate that the structural adjustment policies that many developing countries have undergone led to a decline in educational expenditure, which considerably decreased in the 1980-90 decade. In many countries, the main way of adjusting the educational budget is through teachers salaries; consequently, the reduction of educational expenditures provoked a significant deterioration in the working conditions of teachers. This deterioration produced in its turn, a series of well-known phenomena: demoralisation, abandon of the profession, absenteeism the search of other occupations and, finally, a negative impact on the quality of education offered to the population. This process, it is important to recognize, had already started before the crisis period and the implementation of the adjustment policies. But the experience of recent decades has proven that it is no

longer possible to maintain the double-talk of rhetorical recognition alongside real deterioration. Those responsible for political decisions seem ready to be more moderate in their promises and more rigorous when it comes to implementing them.

6. The second traditional position about teachers which has also lost ground is the one which is based upon viewing the teacher either as a "victim" of the system or as "guilty" of its poor results. Considering the teacher as a "victim" puts all the accent on the problem of the working conditions and the material shortcomings teachers have to face, setting aside any discussion about their educational function. During recent years, however, this vision of teachers' work was counterbalanced by an alternative opinion that tended to consider teachers as "guilty". This position was supported by the mediocre results of tests or of other educational assessments applied in various countries where teachers were, in many cases, accused of being mainly responsible for low learning output, discrimination against girls and pupils from ethnic minorities or from cultural backgrounds different from the dominant ones, or for authoritarianism in the classroom. Obviously, it is not possible here and now to make an objective analysis of the various factors which explain educational achievement, but what is certain is that reducing the debate to the alternative "victim/culprit" not only sheds no light, on the contrary, obstructs an open discussion which would permit us to escape from the vicious circle of mutual recriminations.

7. Recent decades have also been the scene of a third kind of approach, resulting from research which significantly underestimates the teachers' role in learning outputs. According to this approach, the teacher is neither a victim, nor a culprit. He or she is simply of little importance. These studies upheld –whether implicitly or explicitly- that the strategies of educational transformation should give priority to factors which had nothing to do with teachers: such as textbooks, school equipment and the amount of time devoted to learning, among others. As can be found in a recent study concerning the proposals for educational reform presented, for instance, by the World Bank, it is surprising to note that from the six main lines of change postulated by the Bank, *"none ... addresses teachers, their selection, training, supervision or participation in the reforms. While the (World Bank) report gives three paragraphs to teacher training and selection as a means to improving quality, it does not give this option a central role among the reforms proposed"*[1]. While the validity of this underestimation can be discussed in regard to past results, there is absolutely no doubt that it cannot be upheld as regards the future. In this context, the recent report of the International Commission on Education for the Twenty-first Century, chaired by Mr. Jacques Delors, establishing learning to learn as one of the central objectives of education for the future. Reaching this objective –later on I shall refer to the other pillars upon which Delors report bases the future of education –implies a very important change in teaching methodologies and the role of teachers. To put it briefly, the development of a life-long learning capacity requires a very lengthy opportunity to keep in contact with teachers who will act as guides, models and reference

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[1] E. Villegas-Raimers and F. Reimers."Where are 60 millions teachers? The missing voice in educational reforms around the world" in *Prospects*. vol. XXVI. N^0 3., September 1996.

points in the learning process. The central actor in the learning process is the pupil. But, in this activity pupils need an expert guide and a stimulating environment that only the teacher and the school can offer.

8. To sum up this point, the debates and materials produced during all the ICE show that it no longer possible to mobilize teachers with mere symbolic recognition, neither by resorting to mutual accusations, nor, lastly, by ignoring the importance of their role in the learning process. The profound transformations which societies are undergoing call for a reappraisal of these approaches and everything seems to indicate that this debate, far from fading out, will become stronger and stronger in the course of the years to come.

9. The profound changes our societies are going through witnessed by the sweeping advance of the new information technologies, the breaking down of the traditional political order, the globalization of the economy and the permanent evolution to which all professions are submitted, could easily lead to feelings of insecurity and fear. Many teachers preservice these transformations more as a threat than as a new opportunity. It must, moreover, be recognized that some educational reform policies tend to stimulate these feelings by introducing changes without taking into account the very situation of teachers. In this context, the experience of recent years seems to indicate that it is necessary to recognize the important difficulty which exists in implementing educational changes efficiently. It is not only a matter of political will or of the availability of financial resources. Both are obviously necessary conditions for change. But the difficulties are more complex and we should become aware of them. When looking at the past, one realizes that the majority of the educational transformations proposed nowadays find their origins in many of the recommendations formulated some fifty years ago by educators like Piaget, Freinet and so many others in different regions of the world; and that the present strategies specifically directed at teachers are widely inspired from the recommendations which the ICE itself adopted at its thirty-fifth session, more than twenty years ago. One of main lessons we must learn form this experience is not to underestimate the difficulties.

The massification of the teaching profession

10. Among the most evident reasons which explains the difficulties facing educational change, the first aspect to consider is the quantitative aspect. According to the latest estimates, more than 50 million people in the world are involved in teaching. Half of them work in primary schools and a third at the secondary level. Furthermore, everything indicates that the number of teachers will continue to grow, due on the one hand, to the expansion of educational coverage in countries which have not yet been able to offer either primary educational coverage in countries which have not yet been able to offer either primary education, and on the other hand to the continuing demand for lifelong education which keeps pace with the advancement of the social development process. Teachers constitute today one of most important sectors of public employment. The quantity and distribution of teachers in the various levels of the system are, however, very heterogeneous. Simply as a general reference, allow me to remind you that, while in Africa 70% of teachers are primary school-

teachers, in Europe and the United States, they only represent 50%. Inversely, while in Africa professors of higher education represent 4% of the teaching profession, in Europe they reach 12% and even 20% in the United States.

11. The quantitative increase of the teaching profession has been associated with diverse important phenomena. The first of them is significant internal differentiation. This internal differentiation is linked not only to professional performance at district levels within the system, but also, for one part *to district types of activity* such as work in the classroom or management and supervisory activities or special attention to pupils' specific needs and, for the other part with the very *different levels of qualifications* required to carry out the same activity in different parts of the world in this regard, international comparison is very eloquent, for instance, to be a primary school-teacher, in many countries it is only necessary to have followed a few years of basic school, whereas, in other places, a higher education degree is required. Very few professions have such a board range of variations in the formal qualifications required for their performance.

12. Secondly, quantitative expansion has also been linked to the loss of prestige which particularly affects primary education. Various studies show, for instance, that middle-aged teachers who work in primary school place greater value on their job than young teachers. This phenomenon can be explained by the fact that older teachers have been trained in the framework of a society in which access to primary school was a very important step and constituted for many pupils the unique educational opportunity of their lifetime. Nowadays however, primary school-teachers know that their activity is part of a longer process to which teachers as much as pupils attribute only relative value.

13. These examples show that we must be careful to pay attention to the fact that teaching is a profession carried out by a very large number of people who while they have a common basic core of skills, also develop a growing specialization not only from the cognitive but also form the affective and practical points of view. This internal differentiation leads to conclusion that it is absolutely necessary to avoid excessive generalizations when speaking about teachers and, even more importantly, when it comes designing training, recruitment or upgrading policies.

14. Within the framework of the complex situation outlined by the massifaction of the teaching profession, it seems to me appropriate to analyze the problems and the strategies for action by using a criterion the sequence through which a teacher is "made". The main steps of this "making" process are three: choice of the profession: initial training; and professional performance. Further to the analysis of these three steps, I should also like to refer to two additional issues which are at present the subject of considerable attention: question of new information technologies; and the integrated or systemic nature of educational policies.

The choice of the teaching profession

15. The first step in the making of a teacher is the moment at which young people decide to devote themselves to teaching. The question put forward by many specialists during the preparation of the Conference was precisely, who wants to

become a teacher or a professor nowadays? The answer prevailing in most regions of the world is that the teaching profession does not attract the most talented young people and it constitutes in many cases a transitory activity in the process of searching for a more prestigious employment.

16. The importance and the dimensions of this phenomenon are not the same everywhere. However, there is a general consensus about recognizing the existence of the problem and the necessity of tackling it urgently. The teachers for at least the first half of the twenty-first century are those young people who are now in teacher-training institutes. Consequently, it is now that one must act if *one wants to guarantee good quality education for the next century*. The regional documents prepared as a basis for the ICE debates provide warming signals which must be listened to. They all agree in stating that teaching is an activity which shows very attractive from the viewpoint of social status: "*Not many people want to be teachers. Brighter students and high achievers opt for others professions*" (Africa); "*Despite the fact that many attempts have been made, only a small number of academically able students want to become teachers*" (Asia-Pacific) "*The Arab teachers still do not enjoy adequate socio-economic status which attracts qualified people to the teaching profession*" (Arab States); "*Most students opt for teachers training as a last chance to attend university*" (Western Europe). National studies carried out in countries as different as Argentina or Pakistan identify the existence of this problem, "*Pakistan faces enormous difficulties in recruiting new teachers and drawing the country's best talent to that field (...) teaching attracts only those who cannot find a better job*". In Argentina almost 70% of teachers in training had thought about following other studies before deciding to become teachers (...) for many of those who study to become teachers, teacher training is considered as a "second class" alternative: whether it be when encountering failure upon entering university or directly, when facing the impossibility of accessing such higher studies".

17. Incentives to attract talented young people to the teaching profession can be very different and may depend on each cultural, economic and social context. However, it must be remembered that, for many years, specialists in this field have recommended paying attention to not only the intellectual qualifications of future teachers but also to the features of their personalities. An appraisal of the discussions which have taken place on this issue during the last thirty years have led a specialists to affirm that it is important to introduce personality tests for those who wish to enter the teaching profession, in order to avoid the recruitment of "fragile personalities wishing to compensate for their weakness by dominating more fragile and defenceless beings. The need for this selection is justified as much by the risks run by the individuals who suffer more acutely from the increasing difficulties facing the profession as by the psychological damage they can compound among their pupils".

Pre-service training

18. The second step, after the choice of career, is pre-service training. In this phase, all diagnoses indicate that the most significant problem lies in the important gulf between training and the actual demands of an efficient and innovatory performance. Teacher training progammes usually remote from the actual

problems encountered in the teaching of socially disadvantaged pupils, such as multi-cultural classes, teaching in marginal areas, the teaching of writing, reading and arithmetic, resolving conflicts, etc. The pedagogical methods taught in initial training often do not refer either to the principles that teachers are supposed to apply in their work; more importance is attributed to purely academic training in place of observation and innovatory practice; priority is given to individual training rather than to team work, and there is more emphasis on purely cognitive aspects than on affective ones.

19. The customary recommendation in the nineteen-fifties and nineteen-sixties was to raise the initial training of teachers to the level of higher education: Many countries created higher pedagogical universities or teacher-training institutes. Although this is necessary, experience has shown that this measure is in no way sufficient. A mere increase in the number of years of teacher training does not result in an increase in the quality of vocational training. In many cases, passing from training in the traditional mid-level teachers' college to training in higher education provokes a loss of specifically in the capacity of teach. Specific training to teach reading and writing or arithmetic tended to disappear and dilute itself in general preparation for literature or mathematics. According to some surveys carried out in developed countries have not been well prepared to teach reading or to perform in marginal social areas. They are not satisfied either with the training offered by universities or higher teacher training institutes and, inversely, look more favourably upon the training provide by people who come from teacher''s colleges.[2]

20. This dissociation between initial training and the requisites of actual performance is one of the particularities of teaching activity. There is probably no other profession with such high-level cleavages. The cause of this phenomenon are varied, but at least two of them should be mentioned. The first is the considerable autonomy which exists among institutions responsible for teacher training and those which is linked to the previous one, is that the most innovatory educational theories result from criticisms made about the pedagogical practices followed in schools. The teaching profession is, paradoxically a profession for which people are trained in accordance with theories which themselves criticize the practices which must actually be followed professionally. This phenomenon should be analyzed in depth. Criticism about typical teaching practices in schools is important and necessary. But if it occurs without the presentation of alternatives, it looses its usefulness and does not provide educators who wish to transform education with the appropriate instruments for action.

21. A large part of the present debate concerning the reform of initial teacher training refers to the relative importance which pedagogical training should have as regards academic training for the discipline the teacher is expected to teach. After a long period during which priority was given to pedagogical training, there was a reaction –at least in theory- which tended to prove that teaching efficiency was linked more to good training in the discipline to be taught than to pedagogical training. At present, the most promising line in this debate is the one

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[2] See Faroux

which places the discussion in the context of the objective that the report of the Delors Commission defines as *learning to learn*. In this regard, mastery of the discipline which the teacher must possess refers to the capacity to transmit the cognitive processes which every discipline requires. This is where the teacher's role, as a guide and model of the learning process, acquires its greatest importance and where it is possible to articulate pedagogical training with academic training. This training is the necessary condition for teachers themselves to obtain the skills which permit lifelong learning and, in turn, to be able to transmit these skills to pupils.

22. Further to the challenge of *learning to learn*, the Delors Report emphasizes another very important aspect of initial teacher training: the development of values and attitudes which promote the ability to *live together*. To perform their work, teachers will be more and more required to have a solid capacity to teach how to overcome conflicts by non-violent means, to promote solidarity, tolerance and understanding between pupils who come from different cultures to contribute to the building of pupils' personality and their ability to choose freely between the numerous options which modern life offers.

23. In the analysis of teachers; professional performance, the debates of the ICE have allowed at least three big problems to the identified: new teachers' first posts: the individualism and isolation which teachers experience and, finally, the role of teachers confronted with educational innovations. There are, of course, other important issues such as professional career opportunities, teacher training, management participation, and the matter of trade unions. However, in view of the time available, I would prefer to concentrate on the three aspects I have just mentioned.

24. The transition between initial training and the introduction to work is a crucial moment in the "making" of a teacher. All evidence coincides to indicate that the first employment has a fundamental importance for the future professional career of teachers. However, there are also numerous accounts stating that there is no appropriate policy that applies at such an important moment. In general, the posts that new teachers occupy when entering the teaching labour market are the most difficult ones from the point of view of management. The youngest and least experienced teachers often find themselves working in schools in marginal areas, where available resources are strictly limited and where the schooled population requires the skills of very competent teachers. The incentives for taking up these jobs are not good and lead to a well-known consequence: young teachers try to relinquish their posts rapidly in search of more favourable working conditions. The cost of this rapid rotation and limited experience is paid for the by pupils coming from low-income families, who suffer from the highest rates of school repetition and failure.

25. The second problem mentioned in the analysis of this phase of the teaching profession refers to the individualism and isolation in which teaches perform their duties. All studies carried out on this problem agree that one of the most important features of the teacher's professional performance is its individual nature. School work organized in this way does not stimulate team communication, nor co-responsibility for the results, and the obliges teachers to

find solutions to the problems they face in their activity "in private". In accordance with numerous studies, this feature constitutes one of the most important obstacles to the development of a common technical culture. The present reforms in the management of education, which tend to stimulate the autonomy of schools by means of projects unique to each school or college, represent, from this point of view, the administrative basis upon which to build teachers' teamwork. The information available indicates that where the autonomy given to a school allows for the establishment of a pedagogical project, teamwork and accumulation of experiences are a necessity for the institutional design itself. However, a change of this nature has important consequences on training and on teachers; working conditions.

26. As regards training, teamwork calls for the incorporation of a greater level of differentiation in professional profiles than at present. A team is made up of people with different skills and abilities, it would be unrealistic to think that it is possible to find all the skills required by educational work in an institution in a single person, from thematic specializations or skills linked to working requirements at different phases of personality development to personal skills permitting the various aspects of institutional work to be tackled: management, negotiation, teaching, evaluation, research, etc.

27. Furthermore, the incorporation of the idea of a teachers' team has significant implications for management and working conditions. How can the mobility of teachers be favoured if emphasis is put on institutional autonomy and if jobs are relevant to what is taking place in each situation? How can a salary policy be defined for teams and not for individuals alone? These questions -and certainly many other points which will come up as advances are made in the development of educational strategies based on an educational offer responding to a population with different needs- do not have any existing answers. Finding answers will require the acceptance of a certain degree of experimentation and assessment of the results in this field, where every country's traditions will play a fundamental role.

28. Further to isolated individual work, the teacher's professional attitude is characterized by a strong scepticism with regard to innovations, particularly those which imply the sharing of authority and responsibility. The analysis of educational innovations has, however, clearly indicated that one of the conditions for their success is precisely the involvement and active participation of teachers. Breaking away from the rigidity of education systems, particularly in the public sector, constitutes another important approach typical of an educational policy ready to face the challenges of the twenty-first century. The generalization of the capacity to innovate is indispensable in order to avoid innovations being concentrated in a few places and becoming the property of one particular sector.

29. Beyond the personal attitude to undertaking innovation, it requires methods and incentives to be introduced in the pattern of educational management. In this regard, it is important for the educational administration to understand that there is no unique way to solve problems. The promotion of innovation means, precisely, accepting that there are more than one possible solution. Creating places where teachers and school directors can find more opportunities to meet

and discuss problems freely, and exchange information and advice, is one of the most important recommendations to stimulate teamwork. Another of the recommendations refers to strengthening the leadership of school directors. After identifying innovatory directors according to school types –for instance, schools in difficult areas- a piloting network should be established which would offer interaction, sharing of experiences, and favour problem solving between them; it could be connected with a national or regional unit which would animate and support their work and experiences; further to developing innovations, this would promote the strengthening of teamwork among school or college directors themselves.

The problem of the new information technologies

30. To terminate, allow me to refer briefly to one of the contemporary issues of much concern to all those interested in the development of education; the problem of the new information technologies. The educational consequences of the development of computing and of its use is presently the object of a broad debate which has various dimensions.

31. First, their effects on the learning process itself must be analyzed. In this respect, and in spite of the deep passion of those who advocate the use of the new technologies and those who oppose them, the actual state of the discussion does not allow definite conclusions to be drawn. Both the over-pessimistic hypotheses which forecast the disappearance of schools and teachers, as well as the technocratic fallacy which considers new technologies as the solution to all problems, have been refuted by reality. The history of education indicates, in any case, that cognitive development and the skills necessary to learn, for learning to live together, for learning to be and learning to do, can be obtained by means of less costly and sophisticated technologies. Fundamentally, there is no doubt that the use of new technologies can become a very important instrument in the learning process. Moreover, their presence is the same use in education. The central problem, however, is that education must train for the skills required for an intelligent and ethically responsible behaviour. In this perspective, the use of technologies is not an end in itself, but a function of cognitive development and of the building up of the personality.

32. Another problem created by the existence of the new technologies, however, is that their development will lead to an accumulation of knowledge in the circles where the predominate. Whatever exists outside these circles will run the risk of a precarious life, as was the case for all information and knowledge which did not become incorporated into books or written documents after the expansion of the printed word.

33. More than the purely cognitive potential of new technologies, there is the problem of how and to what extent to incorporate the technological variable into democratic educational policies, if this is not done, it may condemn to the sidelines all those who did not master the codes which give users access to these instruments.

34. Secondly, and in direct relation with the problem of access to technology, comes the question of the costs of this operation. This is not a trivial problem since it is only a matter of initial investment but also of ongoing expenses brought about by the adoption of new technologies (maintenance, permanent updating of hard, and software, etc.). The massive incorporation of new technologies into education means that what was once a problem exclusively concerning technical and vocational education now concerns everyone. It will no longer be possible to have a low-cast general education of good quality which is limited to a classroom, desks and a teacher who gives lessons. The fight for resources and about who must bear the costs of general education will be more and more intense, and there is no reason to predict that, without permanent pressure on the part on the part popular sectors of society, the distribution of new technologies will assume a democratic nature.

35. Thirdly, new technologies redefine the problem of living together. A common feature of all these technologies is that they imply individual work and the mediatization of relationships between people by means of screens, cards or other instruments. Extreme versions about the social consequences of the new technologies have been put forward on this theme, going from the utopia of all being linked to all, the suppression of geographic boundaries, physical distances, time limitations and bureaucratic and political regulations, up to the Orewlian image of a society made up of dismantled beings, submitted to a total control exercized by instruments able to oversee every detail of their lives.

36. It is possible to envisage both possibilities, but it would be most hazardous to attribute one or the other consequence to technology itself. A non-technocratic position towards this problem is to identify the social demands which are able to stimulate the development of technologies in favour of the strengthening rather than of the breaking down of social links. In this respect, the introduction of new technologies is supposed to liberate the time now devoted to routine tasks and suppress spatial or technical communication barriers which diminish personal development. In this sense, technologies contribute to significantly increasing our access to information. But all analyses in this field indicate that, as with information which in itself does not imply knowledge, the mere existence of communication does not imply the existence of a community. Technologies offer us information and permit communication, which are necessary conditions for knowledge and community. But the building up of knowledge and community are the tasks of people, not of instruments. This is precisely the role to be assumed by new technologies in education. Their use should liberate the time now used for transmitting or communicating and allow it to be devoted to the building of knowledge and the creation of stronger social and personal links.

The comprehensive character of future policies

37. The analysis of the teachers' roles in this moment of profound social changes clearly demonstrates the enormous complexity of the problems and the necessity to face them with systemic action strategies and not with fragmented policies. During the previous decades and in response to the deterioration of the working conditions and prestige of the profession, there was a natural tendency to focus the debate about the teachers' roles in terms of their material

situation. This partial approach has shown its limitations and there is now a growing consensus towards recognizing the need to tackle the problem from the multiple facets making it up. But, as has been repeatedly said about the systemic approach to educational strategies, recognizing the need to tackle all dimensions of the problem does not mean that it is possible, nor advisable, to try to solve everything at the same time. The systemic practice must be understood as responding to the necessity of defining a sequence of actions according to which the "when and how" of tackling the various dimensions of the problem would become clear. The enormous diversity of the present situations existing in our societies indicates that it is impossible to establish a generally applicable sequence. Strategies must adapt to local conditions and this is where they can be appropriately defined.

38. The outcomes of the ICE, as well as the mobilization and awareness-raising provoked during its preparation, are a very important stimulus for all those who are working towards improving the quality of education for all. We should now focus our resources and technical skills in follow-up to the Conference. In this context, the forty-third World Assembly of ICET is one of the most important forums in which the follow-up of the ICE can be discussed. Thank you very much for this opportunity to present the ICET outcomes and for your attention.

PART (IV)

TOPIC ONE
Enhancing Values in School Reform

CONCURRENT SESSION PAPERS

ELEMENTARY SCHOOL PRINCIPAL'S TIME MANAGEMENT
A FIELD STUDY

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INTRODUCTION

Interest in time study is not new in the field of administration .Taylor ~ 1911), for example, used the' time and motion study ' approach to determine the best performance of workers in industry (29: 181) whereas F & L Gilbreth (28: 196 -197) focused on man's movement in relation to time.

Currently, there is a growing interest in the study of time management for several reasons: 1) the complexity of the work environment Socially, politically and economically, 2) the rise in the annual change rate and the concomitant problems of being unable to keep pace with the change(Toffler 1990) ~ 4:20-22), 3) the rise in the expectations of organizations of their personnel roles, 4) the increasing interest in studying individual's attitudes towards time (Dubinskas1988) (15:3-38), 5) considering time a valuable source which should be wisely managed (12:189) , (1 1 175), (26:171), (24:204),(13:21 5). For these reasons and others, individuals as well as institutions are looking for new means for time management (21:201).

In the area of educational administration, different researchers studied the relationship between time and persons involved in the educational process (students, teachers , supervisors, principals, etc.) Knight, 1990 (26), Fisher & Berliner (ad.), 1985 (20), Anderson 1984 (10) ,Smith1979(30),Kmetz& Willower 1982 (25), Martine & Willower 1981 (27).

The statement of the problem:

The present study aims at investigating how the elementary school principal in Egypt manages his time at work, and how much time he gives to each of the different tasks and activities performed daily . It also alms et investigating the difference between actual and ideal distribution of time allocated to each task . In addition, the study aims to find out the most important time wasters for the school principals . Specifically, the present study addresses the following questions:

1. How does the elementary school principal manage formal school time ?
2. What are the tasks which consume most of the principal's time ?
3. How much time(actual and ideal) is spent on each of the principal's tasks?
4. What are the time wasters for the elementary school principal ?

Literature related to the present study will be reviewed with special reference to three major dimensions: a) analysis of the principal's work time, b) time wasters and c) improving time management.

With regard to the first dimension, i.e analysis of the principal's work time, Wolcott (1973), in his study entitled :" The man in the principal's office " which is an exemplar of the ethnographic studies dealing with elementary school principals, used ' intensive data collecting techniques' to identify the tasks performed by the primary school principal', the time spent in each task and the interaction between the principal and teachers, students, personnels, parents, and people of the local community . The study showed that the pre-planned meetings (26%) and sudden meetings (25%) were at the top of the tasks which occupied the principal's time . It was also found that (50%) of the principal's time was devoted to teachers and personnel, (20%) to students, and (30%) to parents and people of the local community .(11:73,76,77), *(16:40).*

In their study of the elementary school principal's work behavior ,Kmetz & Willower (1982) (25:62-78), indicated that the average number of tasks performed daily by the principal was 123.3 . Twelve percent of these tasks only were devoted to evaluating and improving the educational process.

The result of the study of Martin & Willower (1981) (27:69-90) entitled: "The managerial behavior of high school principals " indicate that the principal spent (16%) on office work , (17to31%) on pre-planned meetings, (5 81%) on phone calls. The study also showed that the principal interacted with students (8 to 24%) and with others (13 to 30%) .

In a large-scale study, Valentine, Clarck, Nickerson & Keefe (16: 43,44) investigated the work time of 1500 middle school principals . It was observed that tasks related to personnel and controlling students' behavior occupied most of the principal's time .In contrast, planning and the professional development of teachers were the tasks which occupied the least of the principals' time .

Working with high school principals, Gorton & Mc Intyre (11:70,71) conducted a *Study* to compare the principal's actual time distribution with ideal time distribution. It was found that there were significant differences between the actual and ideal time distribution. Hager & Scarr (16 :46 ,47) also reached similar conclusions .

With reference to the second dimension, i.e time wasters, various studies investigated managers' work time in order to identify these wasters and the time spent on each of them. Le Beuf (8:63) for example, asked managers in 14 countries to specify the most important time wasters in their work . At the top of these wasters were: phone calls, unexpected visitors, pre-planned and sudden meetings, unclarity of priorities and objectives, and inaccurate information . Other researchers, e.g., Miller (3:50), Prisclia (17:27) and Alessandra & Cath Carth (8:556,559) had similar findings .

It is noteworthy that these studies investigated time wasters of managers in non educational institutions. There are few studies conducted in this area with school principals. Huges & Uban (1:268,269), for example, found that some of the time wasters for school principals were: office work, meetings, communication problems , personnel problems, and maintenance of the school building . Hence ,the present study may contribute to fill the gap in this area, i.e., school principals' time wasters .

Studies related to the third dimension, i.e. improving time management, focused on offering managers several methods which may help them in making better use of their work time . Some of these methods included: specifying objectives and priorities clearly, setting up time plans , establishing proper communication, controlling time, and distributing work among personnel effectively (Ferner 1980 , (19:12,13) ; Knight 1990(26:174), Hill 1989(22: 79-82) ; Campbell, Corbally ,& Nystrand 1983 (11; 175, 176) hodgetts 1990 (23 356 358)

The field study

In the light of the questions addressed, the present field study aims to:

1. Identify the tasks performed daily by the elementary school teacher.
2. Find out how much time actually is spent on each task.

3. Find out the tasks which occupy the most and the least of the principals' time.
4. Find out the tasks which, in the principals' opinion, ought to take most of the principals' time .
5. Find out the most important time wasters for principals.

Tool of the study

The present survey study used the diary keeping technique (14 :158)., and the time log (18:80-94). The researcher constructed a questionnaire which included three mayor sections:

1. Time record : This section aims at identifying the tasks performed daily by principals and the time spent on each task . The respondent is required to record all tasks he performs daily and the time he actually speeds on each task in minutes . A sample record was provided for principals as an illustration.

2. This section included 12 tasks usually performed by school principals . These tasks (see table 1) were selected from literature: 1992 (9); 1993(5;105-106) 1987 (16 :43,44); 1991 (1 : 145 - 190). Respondents were required to specify the time they "ought to" spend on each task on a five point scale: very long time , long time, average, short time and very short time .

3. Time wasters: This section included twenty causes of time wasters for school principals collected from related literature: 1991 (8:63). 1982 (17:27);1994 (3:50); 1983 (6 :317-319) . Respondents were required to rate the importance of these twenty causes on the same five- point scale .

Sample: The questionnaire was sent to seventy elementary school principals in four provinces in Egypt Cairo, Beheira, Al-Fayoum and Ismailia . Only 45 principals returned the questionnaire . Five of these were excluded because respondents did not provide accurate information included 40 principals .

Data analysis: In his analysis of the data of the study, the researcher used the technique known as the Work Distribution Chart . This chars allows the researcher to recognize the tasks performed by school principals and the time they spend on each task . Therefore, the chart facilitates the researcher 's work of analysing and evaluating time management . In order to determine the time spent on each task in relation to other tasks .The researcher used percentages .

Findings of the study: The findings are classified in accordance with the four major questions addressed by the study . With regard to questions (1) and (2), i e.Ouestion1 :How does the primary school principal manage formal school time?Question2:What are the tasks which consume most of the principal's time ? analysis of the principal's responses indicated that the primary school principals performed a variety of tasks (see table 1) . Investigation of table (1) shows that:

1 - The primary school principals' daily work is focused on eleven tasks only. Principals have no time for school curriculum development . The table also shows the time spent by principals on each task .

2 - The first three tasks, in table _(1), consume 60.34 % of the principals' time . The other eight tasks consume only about 40% of the time . If we take into consideration Pareto's principle which indicates that the effective principal focuses his time on 20% of the tasks, i.e. the most important ones, (8: 35 ~) we can realize that the findings of the present study are in harmony with Pareto's principle.

On the other hand, the tasks which consume most of the Egyptian elementary school principals' time in the present study differ from the tasks which consume most of the principals' time in the related literature . This may be due to the fact that there is no general agreement among educational adminstrators on task priorities.

In addition to these findings, the work distribution chart indicated that the average number of work hours for the principal in the present study was 5 hours and 40 minutes. This number is remarkably loss than the number of work hour for principals in the related literature . (25 :68); (27 :72) .This is due to the fact that many Egyptian primary schools follow the two - shift system (i.e. one school starts in the morning till noon and another school, in the same building, starts at noon) .

In order to answer question 3: How much time (actual and ideal) is spent on each task?, responses were analyzed in terms of average (out of 5) and average percentage . Table (2) shows the ideal distribution of time spent on each of the tasks performed by the principals. Investigation of the table indicates that the first three tasks scored an average over 75 % . These three taks are: administering and organizing evaluation & follow -up processes (4.07/5 average 81.50 %); providing opportunities for the integral growth and care for students (3.97/5; average 79.5 %), and setting up en effective evaluation system (3.9 /5, average 78.5 %) . Comparing the order of tasks in table (2) (i.e. the ideal) with the order of tasks in table (1) (i.e. the actual) shows that the first two tasks had the same order, whereas the third task in table (2) ocuppied the eleventh rank in table (1) . It is also observed that the third task in table(1) ocuppied the eleventh rank in table (2) . But there were no statistically significiant differences between the actual distribution of time on task (table 1) and the ideal distribution of time (table 2) .

Further investigation of table (1) shows that principals actually spent more time (74.22 %) on seven administrative tasks(1,3,4,5,6,9,10 in table1) and spent (25.57 %) on four technic tasks (2, 7, 8, 11 in table 1 ~ . In the ideal case (table 2), in contrast, respondents indicated that they would spend more time (over than 60% of work time) on seven tasks, five of which were technical ones (2, 3,4,6and7 in table 2). With regard to question 4: What are the time wasters for the elementary school principal ?, investigation of table (3) indicates that 15 of the time wasters were agreed upon by over 60% of the respondents . Seven time wasters only were agreed upon by over 70 % of the respondents. These seven are: unexpected visitors (87.5%), going to hospital (82.5 %), paper work and correspondence (80%), sudden meetings (77.5 %), customs and traditions (75%), unclarity of priorities (72.5%), and hesitation and postponment of decisions (70%). Comparing the findings of the present study with other studies revealed interesting differences Le beuf (8:63), for example, reported eight time wasters; four of them were reported in the present study (i,e. unexpected visitors, sudden meetings, unclarity of priorities, and hesitation and postponment of decisions . Some of the time wasters in the present study were absent in le beuf's s study (i.e. going to hospital , paper work and correspondence, and customs and traditions) . These time wasters were also reported by another Arab researcher (2: 136) . This indicates that time wasters may vary from one culture to another . It is noterworthy that one time waster reported in the present study (i.e. customs and traditions) was never reported in foreign studies e.g.: (3:50); (8:559,586), and (2: 132-136).

Further investigation of table (3) shows that three of the time wasters were agreed upon by 50% of the respondents or less. These are: leaving school before the formal leave time (50%), surplus labour (50%), and phone calls (27.5%). Table (3) also shows the time wasted on each of the time wasters reported in the present study as well as their order . Correlation between the order of time wasters and the order of time spent on each of them was significiant (i.e. 0.30) .

Thorough analysis of all the findings of the present study reveals that time management and time wasters are influenced by three major variables: personality traits, societal and professional variables .

1 - Personality traits:

Research shows that personality traits are an influential factor with regard to time management . A person who believes that he can control the environment around him can effectively manage his time . (2:26); (26: 177). A hesitant personality, for instance, may cause more time wasters such as: hesitation in making decisions, postponment of decisions, inability to control others .

2 - Societal variables:

Time management varies from one society to another. Customs and traditions of the society greatly influence time management . People in a society may learn to value time formally (through educational institutions) or informally through mass media . In some societies, customs such as: dropping in at any time, chatting during work, coming late to work, reading newspapers, may be the prime causes of time wasters .

3 - Professional variables:

A person who does not realize his job duties may not manage his work time in effectively. Such a person may not be aware of work priorities. (7:79-101) . In such a case he may not manage his time appropriately ,i.e. he may speed too much time on less important tasks .

In conclusion, the researcher suggests the following future studies:

1. Planning a programme for training school principals on time management .
2. Time management by school principals: a comparative study between an urban area and a rural one .
3. Time wasters for school principals: an analytic study .

Table 1

The principals' tasks and the percentage of time spent on each task (status quo)

Tasks	time %
1-Administering and organizing evaluation &follow-up processes.	30.30
2- Providing students with opportunities for growth.	17.07
3- Administering and organizing communication processes.	12.97
4- Administering and organizing material facilities at school.	9.37
5- administering and organizing relationships with local community.	9.07
6- Administering and organizing personnel.	7.83
7- Promoting professional development of school staff.	4.17
8- Setting up plans for improvement.	3.43
9- Administering students affairs.	2.48
10- Administering and organizing financial affairs.	2.20
11- Establishing an effective evaluation system.	0.90
12- Developing school curriculum.	0.00

Table 2

The principals' tasks and the percentage of time spent on each task (the ideal view)

Tasks	Total score out of 5	Average %
1- Administering and organizing evaluation & follow -up processes .	4.07	81.50
2- Providing students with opportunities for growth .	3.97	79.50
3- Establishing an effective evaluation system .	3.90	78.50
4- Setting up plans for improvement .	3.42	68.50
5- Administering students affairs.	3.40	68.00
6- Developing school curriculum .	3.35	67.00
7- Promoting professional development of school staff.	3.05	61.00
8- Administering and organizing financial affairs .	2.97	59.50
9-Administering and organizing material facilities at school.	2.90	58.00
10 -A dministering and organizing relationship with local community.	2.67	53.40
11- Administering and organizing communication processes.	2.60	52.00
12- Administering and organizing personnel .	2.50	50.00

Table (3)
Percentage of agreement on time wasters and the time spent on each

Time waster	Disagree	Agree	Time spent on each-waster					average	order
			V.L	L.	A.	S.	V.S		
1- Phone calls.	72.5	27.5	9.0	9.0	18.1	18.1	45.5	43.6	16
2- Unexpected visitors	12.5	87.5	8.5	22.8	25.7	25.7	17.1	56.0	6
3- Sudden meetings.	22.5	77.5	6.4	9.6	38.7	29.0	16.0	52.2	10
4- Unclarity of priorities.	27.5	72.5	13.7	24.1	24.1	20.6	17.2	59.3	2
5- Ineffective delegation of power.	35.0	65.0	19.2	15.3	11.5	19.2	34.6	53.0	7
6- Hesitation and postponement.	30.0	70.0	10.7	7.1	21.4	17.8	42.8	45.0	15
7- Overflow of paper work and correspondence.	20.0	80.0	34.3	18.7	28.1	9.3	9.3	71.8	1
8- Chatting	32.5	67.5	3.7	11.1	22.2	18.5	44.4	44.4	17
9- Labour surplus.	50.0	50.0	15.0	20.0	30.0	15.0	20.0	59.0	4
10- Reading newspapers and magazines.	40.0	60.0	4.1	0.0	12.5	20.8	62.5	32.5	20
11- Coming late to school.	47.5	52.5	9.5	14.2	0.0	14.2	61.9	39.0	18
12- Going to hospital.	17.5	82.5	12.1	12.1	21.1	27.2	27.2	50.9	11
13- Drinking tea and coffee.	35.0	65.0	3.8	0.0	11.5	26.9	57.6	33.0	19
14- Leaving school before closing time.	50.0	50.0	10.0	0.0	20.0	25.0	45.0	45.0	14
15- Sudden interruptions.	35.0	65.0	15.3	15.3	11.5	11.5	46.1	48.4	12
16- Customs and traditions.	25.0	75.0	20.0	10.0	20.0	13.3	36.6	52.6	9
17- Orderly records.	45.0	55.0	36.6	9.0	9.0	4.5	0.9	59.0	3
18- Incomplete information.	37.0	62.5	16.0	16.0	16.0	20.0	32.0	52.8	8
19- Information coming late.	32.5	67.5	18.5	22.2	11.1	29.6	18.5	58.5	5
20- Personal des-organization.	37.5	62.5	16	0.0	32.0	4.0	48.0	46.4	13

N.B V.L. = Very long L. = Long ; A. = Average; S. = Short ; V.S. = Very short

References

أحمد ابراهيم، أحمد، نحو تطوير الادارة المدرسية، دراسات نظرية وميدانية، دار المطبوعات الجديدة، الاسكندرية، جمهورية مصر العربية، ١٩٩١م.

أبو شيخة، نادر أحمد، ادارة الوقت، مكتبة الملك فهد الوطنية، المملكة العربية السعودية، ١٩٩٤م.

العديلي، ناصر محمد، ادارة الوقت، مكتبة الملك فهد الوطنية، المملكة العربية السعودية، ١٩٩٤م.

توفللر، الفين (ترجمة محمد ناصف)، صدمة المستقبل – المتغيرات في عالم الغد – نهضة مصر، القاهرة، ١٩٩٠م.

عبود، عبدلغني وآخرون، ادارة المدرسة الابتدائية، مكتبة النهضة المصرية، القاهرة، ١٩٩٣م.

عصفور، محمر شاكر، مذكرات في التنظيم والأساليب، معهد الادارة العامة، المملكة العربية السعودية، ١٩٨٣م.

مرسي، محمد منير، الادارة التعليمية – أصولها وتطبيقاتها، عالم الكتب، القاهرة، ١٩٩٤م.

هوانة، وليد عبداللطيف (مترجم)، ادارة الوقت، سلسلة: فن وعلم ادارة الأعمال، معهد الادارة العامد، المملكة العربية السعودية.

خليل، الحاج سليمان سعيد، البرنامج التدريبي المطور لدورة الادارة المدرسية، وزارة التربية والتعليم سلطنة عمان، ١٩٩٢م.

Anderson, L (edt) Time and School Learning, Croom Helm Ltd. Great Britain, 1984.

Campbell, R., & Corbally, J. & Nystrand, R., Introduction to educational administration, six edition ,Allyn and Bacon, Massachusetts, U.S A ,1983

Day,C, & Johnston D, & Whitaker, P. Managing primary schools,a professional development approach, Harper & Row Ltd , London, 1987 .

Dean, J. Managing primary school, C room Helm Ltd. U S A , 1987

Dennison ,W., Managing the contracting school ~ Biddles Ltd. Guilford Great Britain, 1985 ~

Dubinskas, F,(edt), Making time, Ethnographies of high technology organizations, Temple University Press, Philadelphia, 1988

Duke, D, School leadership and instructional improvement, Random House .New York. 1987

Elfrey, P., The Hidden agenda ,recognizing whet really matters at work, John Wiley and sons, New york, 1982 .

Ellis ,A., Educational leadership appraisal, a study guide for professional growth in school administration, Centre for the advancement of education, Nova University, Dutton Press Inc., U.S.A.,1987 .

Ferner, J.,Successful time management, a self- teaching guide, John Wiley and sons, new york, 1980 .

Fisher, C.,& Berliner, D.,(edt), Perspectives on instructional time, research on teaching monograph series, Longman, New York, 1985 .

Hess, K., (eat) After shock, helping people through corporate change ,John Willey and Sons, New York, 1987 .

Hill,T,Managing the primary school, David Fulton Publishers Ltd ., London, 1989.

Hodgetts, r., Modem human relations at work, fourth edition, the Dryden Press, U.S.A. 1990.

Hussen IT., (edt.) The encyclopedia of education .research and studies Vol 2 ,Pergamon press, U S.A. ,1990

Krnetz, J.& Willower ,D.,Elementary school principal's work behavior Educational Administration Quarterly, Vol.18, N. 4 Fall 1982 .

Knight, B., Managing school time, Longman group, U.K., 1990.

Martin, W., & Willower ,D., the managerial behavior of high school principal's, Educational Administration Quarterly, Vol., 17, N. 1, Winter 1981 .

Rashid, A., & Archer, M., Organizational behavior, Methuen Publications, Toronto, Canada,1983.

Scarpello, V., & Ledinka ,J., Personnel/human resource management, environment and functions, P W.S. ,Kent Publishing Company, U.S.A. 1988 . 30 -Smith, N. Allocation of time and achievement in elementary social studies, journal of Educational Research ,N 4 ,1979.

ENHANCING INSTRUCTIONAL QUALITY THROUGH EDUCATIONAL REFORM: VALUE-ADDED AFTER FOUR YEARS

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The Context

In 1989 Jordan embarked upon an ambitious educational reform program to restructure and revitalize it., basic and secondary education system. The main goal of reform focused at enhancing student achievement levels. The key reform elements: reconstructed curricula, newly designed textbooks and instructional 'materials, and inservice teacher training in classroom applications of innovative instructional methods for using new textbooks and materials were introduced for the first time in 1st, 5th, and 9th grades in the scholastic year 1991-92. Next year they were introduced in 2nd, 6th, and 10th grades. By the year 1994- educational reform had covered nearly all the school grades (1-12).

Recognizing the fact that the ultimate test of the impact of educational reform depends upon enhanced student achievement levels, the National Center for Educational Research and Development (now renamed as the National Center for Human Resources Development (NCHRD)) designed a reform impact evaluation program to assess improvement in instructional quality reflected by student achievement levels. The assessment design entailed a stratified two-stage random national sample of 245 schools. One section was randomly selected if schools contained more than one sections in the 8th grades. (For detail about sampling characteristics and domains of variables tested, see Ahlawat, 1993; Ahlawat, et al., 1994 a, 1994b).

Students were tested in three subjects, Arabic Language, Mathematics, and Science, at the end of the 1992-93 scholastic year. In addition to achievement in the three subjects, questionnaires were administered to students, parents, teachers and principals to gather various types of information on attitudes, beliefs, and perceptions about schools, classrooms, instruction and management practices. (see Annex I for domains of variables included in the study).

At the first stage information was collected primarily to serve as baseline data to study changes (if any) after about four years of educational reform. The same achievement tests and questionnaires were administered again to the 8th grade students in the same schools. The second testing took place after the students had completed 4 years under the reform program using new curricula and textbooks taught by teachers who had received inservice training in innovative instructional techniques recommended to foster critical thinking, problem solving, self-learning, and higher level cognitive skills in students.

While the whole assessment program covered achievement testing in three mayor subjects (Arabic, Mathematics, and Science), this study concentrates on Mathematics achievement alone.

The samples of 8th grade consisted of 2,484, and 3,747 students, respectively, for the years 1993 and 1995. In 1993, however, only about one half of the students in each sampled class took the mathematics test. Thus the mathematics test sample in 1993 consisted of 1750 8th grade students. In the year 1995, the mathematics tests were administered to the whole classes. The comparisons of performance on the math test 8th grade classes between the years 1993 and 1995 were based on the same school units. It should be clear that schools and grades were the constant units of comparison while the student populations on the two testing occasions were evidently different. Thus, the same grades were measured on the same tests in the same schools on two different occasions. On the first occasion students of 8th grade had no exposure to the elements of education reform, whereas, on the second occasion the students of 8th grade had been exposed to reform processes continuously for four years.

The following section presents a brief description of the contents and composition of the 8th grade achievement test of mathematics and its psychometric properties on both testing occasions (1993, 1995) based upon the performances of samples.

Composition of the 8th Grade Math Achievement Test

The 8th grade mathematics achievement test consisted of 46 items of which 30 were multiple-choice and 16 supply-response. The test was designed to cover both new and old curricular contents and objectives. Generally, the old and new curricula shared the same contents but a few new topics namely, Probability and Trigonometry were added to the newly constructed math curriculum while a few topics were shifted to the 7th grade textbook.

The test was designed to study improvement in student achievement levels (if any) after the introduction of new curricula, textbooks and other changes stipulated by the comprehensive basic and secondary education reform in Jordan. The test covered three broad cognitive skills (Conceptual Understanding, Procedural Knowledge, and Problem Solving) and eight content topics (Basic Concepts, Algebra, Geometry, Measurement, Ratios, Numbers, Probability, end trigonometry). The last two topics i.e., Probability and Trigonometry, to which five test items were devoted, were not covered by the old (pre-reform) curricula. When the test was reproduced for the 1995 testing, faults crept in two of the items, so they were discarded. The three Probability items and two Trigonometry items were analysed separately.

Therefore. math achievement comparison of the pre-reform and post8th rade students' populations were based on test and sub-test scores computed from various combinations of the 39 items which were covered by both old and new curriculums.

Table (1) presents the distribution of the 39 test items across venous cells of a table of specifications.

Table (1)
Table of Specifications for the 39 Math Test Items Common to Both Old and New Curricula for the Eighth Grade

Skills Content	Conceptual Understanding (CU)	Procedural Knowledge (PK)	Problem Solving (PS)	Total
Basic Concepts (BAS)	3	3	--	6 15%
Algebra (ALG)	4	6	--	10 26%
Geometry (GEO)	5	2	--	7 18%
Measurement (MEA)	--	7	--	7 18%
Ratios (RAT)	2	1	1	4 10%
Numbers (NUM)	2	3	--	5 13%
Total	**16** **41%**	**22** **56%**	**1** **3%**	**39** **100%**

As can be seen from Table (l) there is relative preponderance of Algebra items (26%) as compared to only 10 percent items from the topic of ratios. Among the three cognitive skill areas, 'Problem Solving' has only a nominal representation. There is only one item (3%) in the whole test that falls into this category. This however is a different issue. At the moment it should suffice to note that in this study the post-reform and pre- student populations' math achievement has been compared on the basis of the same 39 items.

In the following section we compare the classical psychometric properties of the test between the post-reform and pre-reform samples of 8th grade students. We remind the reader that in the post-reform testing all the students in ~ sampled class took the math test whereas in the pre testing only one half of the students in a sampled class were administered the math test the other half took the science test.

Psychometric Properties of the Grade 8 Math Test in the Pre-Reform and Post-Reform Populations

Reliability Indices of the Whole Test and Subscales in the Post and Pre Reform Populations.

Table 2 presents the alpha coefficients of the whole test and of all the subscales computed from the two populations.

Table (2)
Math Test Scale's and Subscales' a - Reliability Coefficients for Pre and Post-Reform Grade 8 Populations
(N: Post = 3747, Pre=1750)

Scale/Sub-Scale (No. of Items)	a- Coefficient	
	Post-Reform	Pre-Reform
Whole Test (39)	.74	.70
Basic Concepts (6)	.18	.31
Algebra (10)	.36	.38
Geometry (7)	.31	.13
Measurement (7)	.62	.52
Ratios (4)	.17	.29
Numbers (5)	.24	.27
Conceptual Understanding (16)	.46	.45
Procedural Knowledge (22)	.67	.60

Cranbach's alpha reliability coefficients were computed for the whole test, for every one of the six content subscales and the two cognitive skill subscales (the third, skill scale 'Problem Solving' had only one item) for each of the two populations. The magnitude of a -coefficient reflects the consistency in the sample's performance over all items defined for a scale or subscale. Higher values of the coefficient indicate homogeneity of performance across items and lower values indicate the reverse, lack of homogeneity of student performance across items. The homogeneity coefficients range from moderate to low. For a 39-item math test, covering six divergent content areas and three different skills, the homogeneity reliability coefficients of .74 and .70 for the post-reform and pre-reform samples, respectively, are reasonably good.

Among the six items, measuring basic concepts, the homogeneity of student performance has decreased by 13%. For the pre-reform sample it was .31 but for the post-reform sample it fell down to .18. For the 10-item Algebra subscale, the degree of homogeneity is about the same. Also for Numbers subscale (5 items) it is about the same. For the seven Geometry items it has increased from .13 in the pre-reform sample to .31 in the post-reform sample, and for the seven Measurement items it has increased from .52 to .62. The 4-item Ratios subscale has shown a 12 points' decrease from .29 in the pre-reform sample to .17 in the post-reform sample.

The homogeneity of performance over the 16 items tapping Conceptual Understanding has not changed. It was .45 for the pre-reform sample and .46 for the post-reform sample. Over the 22-item Procedural Knowledge subscale it has increased from .60 in the pre-reform sample to .67 in the post-reform sample.

Given the same set of items increase in homogeneity of students' performance may be interpreted as better grasp over the specifics and consolidation of knowledge and understanding of the various aspects connected with a defined area of knowledge and content; the decrease may be interpreted as its converse.

Table (3) continued

23	M25	.21	.14	.07***	.22	.18
24	M26	.33	.22	.11***	.33	.08
25	M27	.28	.17	.11***	.04	.05
26	M29	.30	.25	.05***	.27	.13
27	M30	.23	.18	.05***	.12	.04
28	M31	.39	.20	.19***	.45	.34
29	M32	.39	.17	.21***	.43	.32
30	M33	.28	.43	-.16***	.17	.26
31	M35	.28	.21	.07***	.25	.15
32	M36	.30	.22	.08***	.21	.01
33	M37	.26	.27	-.01NS	.09	.11
34	M38	.24	.29	-.05***	.01	.18
35	M39	.04	.06	-.02***	.33	.32
36	M40	.004	.04	-.04***	.14	.20
37	M41-A	.51	.39	.12***	.11	.32
38	M42	.14	.07	.07***	.41	.32
39	M43	.41	.30	.11***	.19	.04
Mean ($\bar{p}$)		.35	.28	.07	.23	.21
MIN		.0035	.02	-.16	.00	.01
MAX		.68	.57	.28	.48	.41
VAR		.20	.18	.01	.02	.01

Note:

* = $P \leq .05$

** = $P \leq .01$

*** = $P \leq .000$

In Table (3), the column titled "Difficulty Pi" is divided into two columns. The "post" column contains the item difficulty index (proportion of students who answered the item correctly) for the post-reform population. Likewise, the column headed "Pre" contains item difficulty index for the pre-reform population of students.

The "Difference" column contains the value of difference between the post-reform and pre-reform difficulty indices of an item. It is generally expected that in the post-reform sample the proportion of correct responses will increase. If this happens then the difference will be positive. If no change has occurred then the difference will be

The Indices of Difficulty and Discrimination Power of the Items.

Difficulty and Discrimination indices of the items for both post-reform and pre-reform samples are presented in Table (3). Difficulty index of an item is actually an index of easiness of the item. In fact, it is the proportion of students answering the item correctly. The larger the value of the difficulty index the easier the item.

Table (3)
Comparison of Difficulty and Discrimination Indices of Items
Between the Post -Reform and Pre-Reform Samples
(N: Post-Reform = 3747, Pre-Reform = 1750)

		Difficulty (Pi)		Difference	Disc. Item-Remainder Corr.	
S. No.	Item	Post	Pre	Post-Pre	Post	Pre
1	M1	.55	.28	.27***	.16	.23
2	M2	.18	.27	-.09***	.14	.31
3	M3	.43	.47	-.04*	.27	.25
4	M4	.23	.19	.04***	.00	.12
5	M5	.62	.41	.21***	.19	.21
6	M6	.61	.49	.12***	.42	.41
7	M7	.45	.33	.12***	.48	.41
8	M8	.68	.47	.21***	.38	.38
9	M9	.39	.21	.18***	.23	.14
10	M10	.58	.44	.15***	.28	.15
11	M11	.31	.32	-.01NS	.17	.17
12	M12	.42	.37	.06***	.10	.08
13	M13	.45	.57	-.11***	.26	.32
14	M14	.35	.07	.28***	.40	.11
15	M15	.36	.28	.08***	.41	.36
16	M16	.57	.47	.01***	.13	.15
17	M17	.02	.02	.00NS	.26	.19
18	M18	.06	.04	.02**	.28	.29
19	M19	.37	.42	-.06***	.12	.19
20	M20	.29	.23	.06***	.14	.01
21	M23	.49	.42	.07***	.05	-.04
22	M24	.51	.43	.08***	.43	.38

zero. If post-reform students' performance on the item has decreased then the difference will be negative.

We tested the statistical significance of these differences by unequal two-tailed t-test. If the difference is not significant at the .05 alpha level, it is marked NS (Not significant). Whether positive or negative, if the difference is significant it is marked by appropriate number of asterisks A single asterisk represents statistical significance at less than or equal to ($P \leq .05$) five percent level but greater than one percent level. Two asterisks indicate the statistical significance at the level ranging from one percent to greater than one per thousand. Three asterisks the significance level of one per thousand or less.

The column headed "Disc. Item-Remainder Corr." contains the coefficient of correlation between the item and the total score computed over the rest of the items in the test.

This item-remainder correlation coefficient is called a discrimination index of the item. The value of discrimination index indicates the power of the item to differentiate between high and low performing groups of students when performance is measured by a student's total test score computed without the score on the item whose discrimination power is being estimated.

If students' ability to answer the item in question is related to their abilities to answer the remaining items in the test then the item's discrimination index represents the strength of this relationship.

The direction of relationship (if the relationship exists) can be positive or negative. On account of the logic of interpretation of the test score, items with negative discrimination are recommended to be discarded from achievement tests. An item will show a near zero discrimination index if: (i) it is ambiguous and therefore interpreted by different students in different ways irrespective of their achievement level in the subject; (ii) the knowledge and skills required to answer this item share nothing in common with ability and skills tapped by other items in the test; (iii) it is so easy that all examinees answer it correctly; (iv) it is too difficult to be answered even by the very bright students; (v) it has been miskeyed. An achievement test item may have a negative discrimination if, due to some reasons, low achieving students answer the item correctly and high achieving students answer it wrong.

Bearing of the Difficulty Index on Change in Performance.

When an item is scored (0/1), its difficulty index, the proportion of students who answered the item correctly is actually the sample mean score of the item. Thus, for each item in the test, we have average performance of the post-reform sample, as well as, that of the pre-reform sample. Given this, we can directly see the difference in the performance of pre-reform and post-reform populations of the 8th grade Jordan on each individual item in the test.

Examining the entries in "Difference" column in Table (3) we see that:

1. Three out of 39, nearly 8%, of the test items register no difference whatsoever between the performances of pre-reform and post-reform populations of the 8th grade students.
2. On 8/39, about 20% items, post-reform students' performance has deteriorated significantly.

3. On the brighter side, on 28 out of 39 (72%) items post-reform students have outperformed their pre-reform cohorts at a high level of statistical significance ($P \leq .000$).

The three items on which there is no significant post-reform improvement belong to rather abstract theoretical and analytical topics in the math curriculum. One item belongs to irrational numbers, one to factorization and one to algebraic analysis. One item is supply response and two are multiple choice. In both testings only 2% students answered the supply-response item correctly. The performance on both multiple choice items is just above chance level and discrimination power is very low. It seems that teachers are not skilled enough to present these concepts in a way that students could have a good grasp of them. Although full chapters are devoted to these topics in the textbook, inservice training under reform does not seem to have impacted the instructional skills of teachers in these topics. These areas were weak before the reform and these are still weak after four years of reform.

The 8 items on which performance has decreased can be classified into two groups: (1) items which were taught in the 7th grade, and (2) items that related to analysis. Two items belong to the topic which has been shifted down to Grade 7 and one belongs to the topic which was covered in the beginning of the year. The performance on these items has deteriorated perhaps due to forgetting effect. Students, everywhere, try to remember things to pass the exam. A substantial portion of learning that was driven by examination is rapidly lost after the exam is over, particularly if the learned material has no chance for later application.

In the pre-reform testing the topic of sets was taught in the eighth grade, while in the new curriculum it has been shifted down to 7th grade. Two factors are at work here. First, the way the teachers introduce new concepts of mathematics do not help pupils understand them clearly. Second, students who learnt the concepts tO pass the 7th grade exam had no motivation to load their memory with the knowledge that had no application in their real life after the exam is over. A combination of such factors has resulted in lowering the performance of post-reform students on the contents which were taught in the 7th grade.

In spite of the fact that the reform program overly emphasizes the analytical skills and critical thinking, on almost all the items of mathematical analysis post-reform students' performance has shown significant decline from the baseline performance standard of the pre-reform students. Although, student performance in this area has always been poor. For instance, one of the four items was answered correctly by only 4% of the pre-reform and 0.4% of the post-reform students. On another item from the same group the performance was 6% and 4% respectively for pre-reform and post-reform students. On the face value, the items look simple, straightforward, and ordinary. This raises the question, how the whole area of analysis is handled in the 8th grade classrooms.

On a pleasanter note, there is statistically significant improvement on 72% of the test items, even though the gains are low to moderate, ranging from 2% to 28%. The average gain on these 72% items is .11 with a standard deviation of .07. The comparison of distributions of item difficulty index in the two samples can provide information about the differences in their performance. The frequency distributions of the difficulty and discrimination indices of the two samples are presented in Table (4)

Table (4)
Comparative Frequency Distributions of the Difficulty and Discrimination Indies of the Grade 8 Math Test Items From the Two Samples [Pre-Reform (1993) and Post Reform (1995]

(a) Difficulty Index

Interval	Post-Reform		Pre-Reform	
	Freq.	% Freq.	Freq.	% Freq.
Lo - .20	6	15	11	28
.21 - .30	11	28	13	33
.31 - .40	8	21	4	10
.41 - .50	6	15	10	26
.51 - .60	5	13	1	3
.61 - Hi	3	8	--	--
Total	39	100	39	100
(b) Discrimination Index (Item-Remainder Corr.)				
Lo - .30	27	69	27	69
.31 - .40	5	13	10	26
.41 - .50	7	18	2	5
Total	39	100	39	100

From the distribution of the difficulty index in the post-reform and pre-reform populations one can see that in the lowest range of difficulty index (.2 or less) the percentage of items has decreased from 28% in the pre-reform to 15% in the post-reform sample. We restate that low values of difficulty index actually represent items with high difficulty levels.

Here the first row of Table (4) designated (Lo-.20) contains those items which were answered correctly by 20% or less than 20% of students. So, this is the category of most difficult items. The percentage of items in this category has fallen from 28 to 15.

On the easier end of the test the last two rows of Table (4) record items that were answered correctly by more than 50% of the students in each sample. In the pre-reform sample only 3% of the test items were answered correctly by more than 50% of the students. while in the post-reform sample the percentage of items falling in this category increased from 3 to 21.

This is an indication of relatively better performance of the post-reform students.

Figure (1)

Grouped Frequency Distribution of Difficulty Index in Post-Reform and Pre-Reform Samples

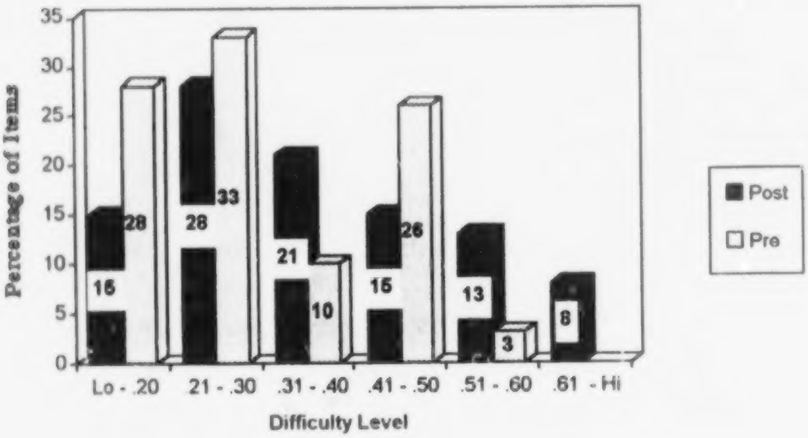


Figure (1) presents a graphic display of the two distributions of item difficulty index.

Item Discrimination Levels in the Two Populations

Regarding discrimination power of the test items in the two samples, the items were categorized into three groups; low, medium, and relatively high. As can be seen from part (b) of Table (4), in both samples the percentage of items in the low group remains the same (60%). In the moderate group the percentage of items has decreased from 26% in the pre-reform sample to 13% in the post-reform sample. In the medium discrimination power group the number of items has increased from 5% in the pre-reform sample to 18% in the post-reform sample. Given the same test, increase in discrimination power reflects clearer conceptualization of what is measured by the test in the minds of the groups of examinees.

Post-Reform Gains in Grade 8 Math Achievement

Having compared the psychometric properties of the test in the post-. and pre-reform samples now we examine the reform gains with respect to the total test score and individual subscale scores of the six content and three cognitive skill subscales. The percentage correct scores on each subscale and the whole test were analyzed. Unequal independent sample t-test was used to test the statistical significance of the difference between post-reform and pre-reform means on each subscale and the whole test. The results are presented in Table (5).

Table (5)
Differential Performance of Pre-and Post-Reform G8 Populations on the Math Test Components (N: Post = 3747, Pre = 1750)

Component	Mean		SE		Diff. in Means	95% CI
	Post	Pre	Post	Pre	Post-Pre	
Totscore	34.7	27.8	.22	.29	6.9***	6.2__7.9
Basic Concepts	37.5	31.1	.33	.51	6.3***	5.1__7.5
Algebra	21.4	19.1	.23	.34	2.3***	1.5__3.1
Geometry	39.1	26.9	.34	.41	12.1***	11.1__13.2
Measurement	45.9	31.4	.44	.55	14.5***	13.2__15.9
Ratios	34.6	30.6	.40	.59	4.0***	2.6__5.4
Numbers	36.1	35.1	.39	.54	1.1^{NS}	-.23__2.4
Conceptual Understanding	39.9	34.4	.26	.37	5.6***	4.7__6.4
Procedural Knowledge	31.5	23.6	.25	.31	7.9***	7.1__8.6
Problem Solving	20.8	13.7	.66	.82	7.1***	5.0__9.2

On the whole test designated by 'Totscore' row there is a gain of about 7%: post-reform students have scored significantly ($P \le .000$) higher than their pre-reform cohorts.

The overall gain, however is composed of different components. Content-wise, it is comprised of the six content scales with varying degrees of gain. Among the six content areas the gain ranges from 14.5% in Measurement to no gain in "Numbers". "Geometry" with 12% gain "Basic Concepts" with *6%* gain comes third, 'Ratios" with 4% gain comes fourth and "Algebra" with a nominal *2%* gain comes fifth.

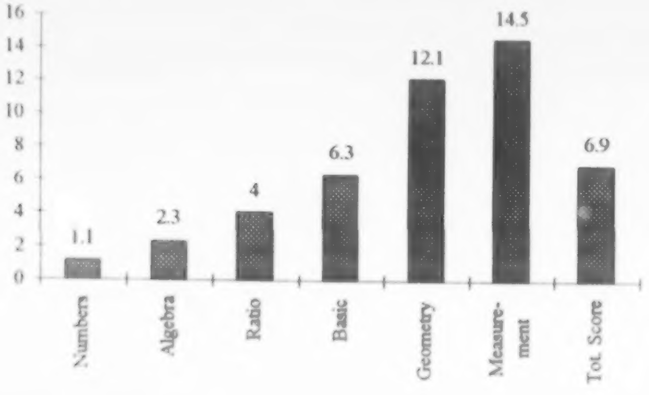
Along the cognitive skills dimension, the gain in each skill area is nearly the same, the observed mean gain score varies from 7.9 (Procedural Knowledge) through 7.1 (Problem Solving) to 5.6 (Conceptual Understanding).

Differential Gain Over Different Areas of Content

Areas of differential gain are clear from Figure (2) which displays a Bar-Graph of mean gain scores in the six content areas.

Figure (2)

Mean Gain Scores of the six Content Areas



In terms of statistical significance (α =.05) of difference in mean gains, judging from the nonoverlapping 95% Confidence Intervals for gain score means, gain in the area of measurement is significantly better than all other content areas.

Geometry gain is again significantly higher than the gain in Algebra, Ratios, and Basic Concepts. There is no significant difference between the gain means of Basic Concepts and Ratios, but gain in Basic Concepts is significantly higher than that in Algebra. We already stated that there was no significant gain in Numbers, so we left it out of comparisons.

Numbers, Algebra, and Ratios turn out to be the major areas of concern. In fact, on the 'Analysis ' items, the performance of both samples was very poor, and the items on which gains were generally negative belong to these three content areas.

Differential Gain Across the Three Cognitive Skills

Among three areas of cognitive skills, gain is significantly higher in 'Procedural Knowledge' than in both 'Conceptual Understanding' and 'Problem Solving', while there is no significant difference between the latter two skills.

We remind the reader that enhancing critical thinking and problem solving skills was an explicitly emphasized objective of the Educational Reform Program (ERP). Enhancing critical thinking and problem solving skills especially after generation-old deep-rooted habits of rote learning and practice drill is easier said than done.

It is however, encouraging to note that there is some progress in this area after the implementation of the reform.

Reform Gains In Different Education Authorities

Having described the impact of educational reform on the math achievement of the eighth grade students for the country as a whole, in this section we examine whether the reform gain is uniformly distributed among the four education authorities or it varies from one authority to another. It should be recalled that all schools, irrespective of their administering authorities, are obliged by the education law to follow the national curriculum and use the same textbooks. In order to study the reform impact in each education authority, post-reform and pre-reform means in each education authority were compared using independent unequal sample two-tailed t-test. The sample size and the mean math test scores of the 8th grade students for both (post-reform and pre-reform) testings; the difference between the two means; its t-value, Degrees of Freedom, two-tailed statistical significance, and 95% Confidence Interval, separately for each education authority are presented in Table (6).

Table (6)
Post Reform Gain in Math Achievement of Grade 8 Students Across Education Authorities (Total score means, difference between post" reform and pre reform means, t-value, and statistical significance)

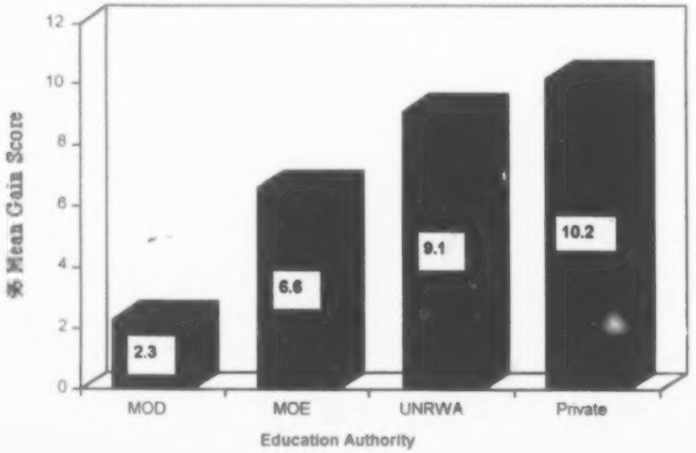
Authority	Post-Reform		Pre-Reform		Post $\bar{X}$ - Pre $\bar{X}$				95%
	N	$\bar{X}$	N	$\bar{X}$	Diff.	t-value	DF	2-Tail sig.	CI
MOE	3035	33.3	1349	26.6	6.6	17.5	2928.1	.000	5.9--7.4
MOD	87	30.8	61	28.5	2.3	1.0	126.4	.313	-2.2-- 6.8
UNRWA	348	39.0	200	29.9	9.1	7.2	417.0	.000	6.6 – 11.6
Private	277	45.7	140	35.5	10.2	7.0	291.2	.000	7.3 – 13.1

Note:
MOE = Ministry of Education.
MOD = Ministry of Defence.
UNRWA = United Nations Relief and Works Agency.

The Column of 2-Tail significance in Table (6) clearly shows that reform gain in the eighth grade students' math test performance is statistically significant (p_.000) in three education authorities viz., MOE, UNRWA, and Private. In the MOD schools, unfortunately, the improvement was not at all significant. The observed gain scores of the four education authorities are presented in Figure (3).

Figure (3)

Mean Gain In 8th Grade Students Math Achievement In the Four Education Authorities



Among the three authorities with statistically significant gain there was, however, no significant difference. Thus, apart from astonishingly poor performance of the MOD schools, the schools in the other three education authorities registered positive change in math achievement, but there was no statistical basis to distinguish among their relative gains.

Reform Impact Across Male/Female Populations of Grade Eight Students

Table (7) presents the sample size, post-reform and pre-reform math test score means, mean gain, t-value, Degrees of Freedom, two-tailed significance and 95% Confidence Interval for the mean gain separately for male and female samples of 8th grade students.

Table (7)
Post Reform Gain in Math Achievement of Grade 8 Students Across Student Gender (Total score means, difference between post reform and pre reform means, t value, and statistical significance)

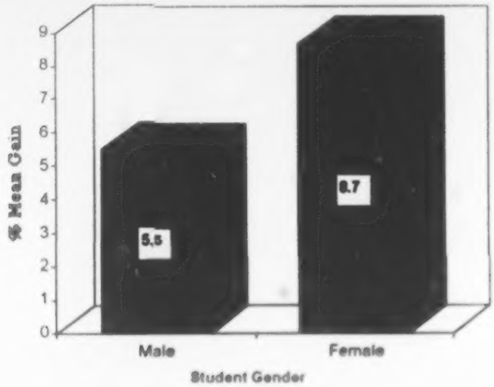
Student	Post-Reform		Pre-Reform		Post $\bar{X}$ - Pre $\bar{X}$				95%
Gender	N	$\bar{X}$	N	$\bar{X}$	Diff.	t-value	DF	2-Tail Sig	CI
Male	2049	32.6	927	27.1	5.5	11.4	1850.8	.000	4.5 -- 6.4
Female	1698	37.2	823	28.5	8.7	15.9	1874.3	.000	7.6 -- 9.7

2-Tail-significance column of Table (7) clearly shows the reform gains are statistically significant ($P \leq$ 000) in both male and female populations of students.

The observed mean gain is 5.5% for male students and 8.7% for female students. Moreover, judging from the 95% Confidence Intervals, this difference between the degree of male and female improvement is statistically significant. This means that female students have derived more benefit from the education reform than the male students have done. Figure (4) displays the mean gain for male and female student samples.

Figure (4)

Varying Reform Impact on Male and Female Students



Reform Impact Across Urban and Rural schools

The statistics needed to compare the reform gains between urban and rural area schools are given in Table (8). The post-reform and pre-reform difference column in Table (8) shows the mean gain scores of urban and rural schools. In both cases the reform gain is statistically significant (P≤ .000)

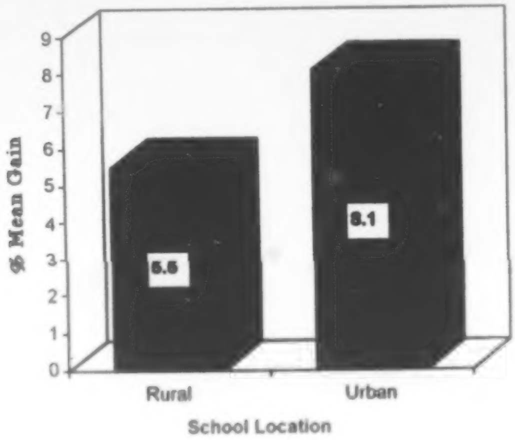
On the average urban schools have shown 8.1% gain against 5.5% mean gain of the rural schools in their 8th graders math achievement .

Table (8)
Post-Reform Gain in Math Achievement of Grade 8 Students Across Urban and Rural Schools (Total score means, difference between post-reform and pre-reform means, t-value, and statistical significance)

Location	Post-Reform		Pre-Reform		Post $\bar{X}$ - Pre $\bar{X}$				95%
	N	$\bar{X}$	N	$\bar{X}$	Diff.	t-value	DF	2-Tail Sig.	CI
Urban	1964	36.8	870	28.7	8.1	15.1	1852.0	.000	7.0 – 9.1
Rural	1783	32.3	864	26.8	5.5	11.4	1808.9	.000	4.6 – 6.5

This shows that urban schools have reaped significantly more benefits from the reform elements than the rural schools have done. Figure (5) gives a graphic display of the differential reform gain of urban and rural schools.

Figure (5)
Differential Reform Impact In Urban and Rural Schools



Regional Differences in Reform Gains on 8th Grade's' Math Performance

Regional differences on critical indicators are of interest because they imply issues related to regional equity. When we collected baseline pre- data in 1993 there were only eight Governorates in Jordan but by the time we collected post-reform data in 1995 the number of Governorates had been raised to 12.

Because our sampling design was based upon schools from the eight Governorates, we have adhered to the same classification of schools for the purposes of studying regional differences. The relevant information about post-reform and pre-reform math test performance of the 8th grade students in each of the eight Governorates is presented in Table (9). In Table (9) the rows representing Governorates have been arranged according to descending order of the observed mean gain score.

Table (9)
Post-Reform Gain in Math Achievement of Grade 8 Students Across Governorates (total score means, difference between post-reform and pre-reform means, t-value, and statistical significance)

Location	Post-Reform		Pre-Reform		Post $\bar{X}$ - Pre $\bar{X}$				95%
	N	$\bar{X}$	N	$\bar{X}$	Diff.	t-value	DF	2-Tail Sig.	CI
Tafileh	60	35.8	26	21.0	14.8	5.4	68.7	.000	9.3 __ 20.2
Zarqa	475	35.7	228	26.9	8.8	8.9	528.8	.000	6.9 __ 10.8
Amman	1455	36.6	675	28.5	8.0	12.8	1459.6	.000	6.8 __ 9.3
Karak	224	33.3	89	25.6	7.7	6.2	202.9	.000	5.2 __ 10.2
Balqa	195	32.8	89	25.0	7.7	5.6	179.2	.000	5.0 __ 10.5
Mafraq	238	32.7	111	27.4	5.3	4.0	323.7	.000	2.7 __ 7.9
Irbid	932	33.5	435	29.1	4.4	6.2	824.5	.000	3.0 __ 5.9
Ma'an	168	38.6	81	24.7	3.9	2.6	123.6	.012	0.9 __ 6.9

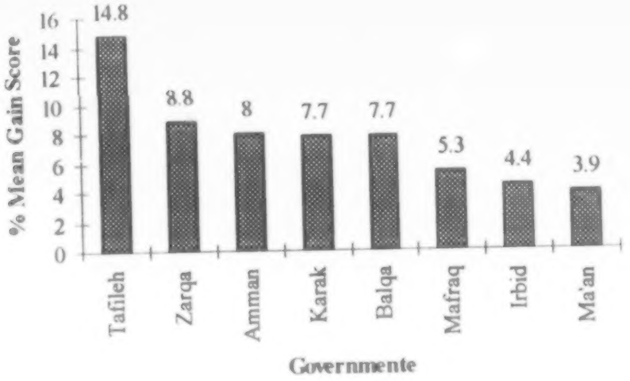
To start with column headed 'Sig.' it is encouraging to note that in all the Governorates the post-reform means are statistically significantly better than the pre-reform means.

The level of statistical significance is very high, (p<.000) in all the Governorates except in Ma an where the p-value is. 012.

Figure (6) displays the observed mean gain score in each Governorate.

Figure (6)

Observed Mean Gain Score on the Grade 8 Math Test Across Governorates



From Figure (6) it is quite clear that the improvement in Grade 8 students' math test performance with 14.8% mean gain score is by far the largest in Tafileh of all the Governorates.

Then, in four Governorates namely, Zarqa, Amman, Karak, and Balqa, with their mean gain scores of 8.8, 8.0, 7.7, and 7.7 respectively, there is moderate level of improvement.

In the remaining three Governorates of Mafraq, Irbid, and Ma'an which have meagre mean gain scores of 5.3, 4.4, and 3.9 respectively, the reform impact is only modest. The wide variation in the gain is crystal clear, it ranges from 3.9% the lowest in Ma'an Governorate to 14.8% the highest in Tafileh.

Regarding the statistical significance of the reform-gain between pairs of Governorates we note that Tafileh has gained from reform statistically significantly better than Amman, Mafraq, Irbid, and Ma'an; whereas, there are no distiguishable differences among Amman, Zarqa, Karak, and Balqa.

On the other hand, Tafileh, Zarqa, and Amman have gained significantly better than Irbid, while Zarqa also has gained significantly more than Ma'an. The preceding conclusions have ensued from comparing pairs of nonoverlapping 95% Confidences Intervals for the mean gain in each Governorate.

DISCUSSION

A national sample of Grade 8 student population was administered a math achievement test in 1993 in order for setting up pre-reform baseline achievement levels in mathematics. The same test was administered again, following the same procedures, to the 1995 eighth grade students' sample from the same schools which were included in 1993. It is apparent that we are talking about two distinct populations of eighth grade students (one of 1993, and the other of 1995). These two populations are assumed to be similar in all respects except one which is that the 1993 students were schooled under pre-reform conditions while the 1995 students have attended classes 5th through 8th under reform conditions which included new curricula, textbooks, instructional materials, and instructional methods.

In addition to reform's technical inputs the **reform environment** engendered, a new mood, a new awareness, and a new outlook towards the quality of education not only in the education community but also in the public at large, nationwide.

From the above-stated premises we can adduce that any real changes in 8th grade students' math test performance could be reasonably attributed to reform conditions. It is from this perspective that we talk of reform impact, gain scores, value added or reform gains.

The results of data analysis, presented in the preceding sections of this paper reveal the following facts.

1) On the whole, in the field of mathematics, the educational reform has made a positive impact on 8th grade students' achievement. The post-reform students outperformed their pre-reform cohorts on the math test by a margin of 7%.

2) The improvement, however, is uneven over different content areas. The **observed** average improvement ranges from 1% (not statistically significant) in 'Numbers' to 15% in Measurement Algebra and Rations are the areas of minimal improvement. From the analysis of individual items we know that in the topics related to abstract theoretical concepts such as indices, roots, irrational numbers, set functions, and in the whole area of analysis there is significant deterioration in performance. When these topics have direct relevance to analytical thinking (a proclaimed objective of reform), why is there no improvement? This is a pressing question.

   It seems that reform activities exert a mixed impact, both positive and negative, depending upon the right and wrong applications of instructional techniques and materials in the classrooms. After informal discussions with some math supervisors it transpired that (i) in a very short inservice training some teachers do not fully grasp some modern instructional techniques and therefore they use them in the classrooms in a wrong way; (ii) some other techniques cannot be properly applied in overcrowded classrooms but teachers feel obligated to apply them; (iii) the math curriculum is too extensive to be properly covered in time allocated to math instruction, but teachers feel under pressure to cover all the topics in the textbook; (iv) some topics are rushed through; (v) teachers and students do not have enough time needed for effective teaching and learning of new concepts and materials; (vi) some topics have been shifted down to 7th grade syllabus; (vii) there seems to be a general weakness in the mastery of basic foundation skills and concepts. All these factors have deleterious effect on students' learning and achievement.

3) The improvement along the three cognitive skills is almost uniform, although the area of 'Conceptual Understanding' is generally the weakest. This further supports the above alluded weaknesses in the foundation skills and concepts.

4) Improvement in math performance varies across education authorities. While there is no improvement in the MOD schools; in the Private, UNRWA and MOE schools it is 10%, 9%, and 7% respectively. However, statistically there is no significant difference among mean gain of the latter three education authorities

5) Female students have shown significantly higher improvement (9%) than the male students (6%). This seems to lend support to common belief that apart from early maturity of females at this stage both female teachers and female students take their respective duties of teaching and learning more earnestly than their male counterparts.

6) Reform. impact is significant in both urban and rural community schools. Improvement in the urban schools (8%), however, is statistically significantly better than that in rural schools (5%). Due to compounded influence of numerous social, cultural, economic, demographic and environmental factors, in general, urban community schools' students perform better on academic achievement tests than their rural counterparts. But here we are investigating the gains due to educational reform, which also seem to have exceeded in urban schools over the gains in rural schools.

7) Reform gains in math achievement vary across regions (Governorates). The gain (15%) is highest in the Governorate of Tafileh and lowest in Ma'an, Irbid, and Mafraq (4%, 4%, and 5%), respectively). In Zarqa the gain is 9% while in the Governorates of Amman, Karak, and Balqa it is 8%. The reasons for variation of reform impact on math achievement of students across Governorates are not clear. The case of Tafileh is still more puzzling because there was absolutely no gain in the math performance of Grade 4 students whereas there is highest gain in the math performance of Grade 8 students.

   Ma'an Governorate schools have shown minimum gain (4%). We should like to point out that Ma'an included the MOD schools in which there was no virtual difference between the pre-reform and post-reform means. While analyzing the per-reform and post-reform performance of the fourth graders we had noted that MOD students performance had decreased by 8%. This does not seem to make sense, what has happened in the MOD schools needs to be properly investigated.

Looking from the brighter perspective it is somewhat encouraging to note that, on the whole, their is statistically significant improvement in 8th grade students' math test performance after four years of reform. We are inclined to attribute the gain to the educational reform. On the other hand, it is hard to say what part of this gain is on account of changes in curriculum, textbooks and instructional practices of the teachers, and what part is due to some sort of Hawthorn effect. Irrespective of the substantive reform inputs, implementation of educational reform had infused the educational atmosphere with a spirit of awareness that something is going on to raise students' achievement levels.

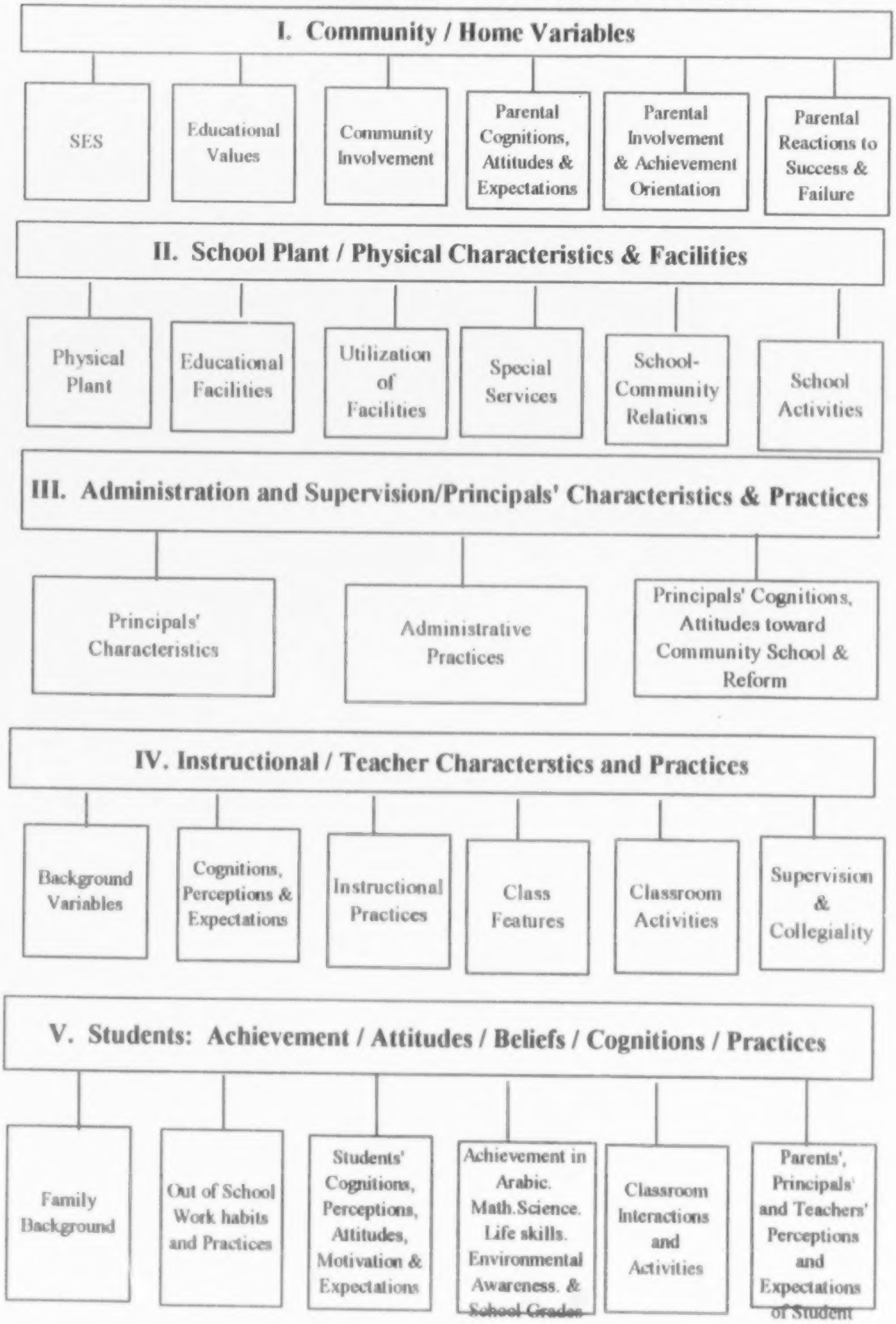
Should this raised consciousness be attributed to reform or not is a matter of philosophical argument. But clearly it should not be confused with such reform inputs as new textbook or new method of teaching. Nevertheless, it is quite conceivable that injection of something like this in the national consciousness could have had a salubrious effect on educational achievement of students.

On the other hand, the reform does not seem to have affected students' analytical skills and other higher cognitive abilities which were specifically emphasized by the educational reform. Judging from the eighth grade students' performance in this area, one apprehends a trace of decline in the development of these critical skills.

Despite reform efforts that include new curricula, new textbooks, teacher guides, and inservice short-term teacher training, changing deep rooted attitudes and practices of teachers and students (not to speak of parents and community) is an uphill task, it requires strong determination and sustained effort. Moreover, as pointed out earlier, to master new techniques of teaching and to apply them successfully in the classrooms requires dedicated effort on the part of the teachers which few of them are inclined to make without proper incentives.

Annex (I)

DOMAINS OF VARIABLES OF THE COMPREHENSIVE NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS


I. Community / Home Variables
SES
Educational Values
Community Involvement
Parental Cognitions, Attitudes & Expectations
Parental Involvement & Achievement Orientation
Parental Reactions to Success & Failure
II. School Plant / Physical Characteristics & Facilities
Physical Plant
Educational Facilities
Utilization of Facilities
Special Services
School-Community Relations
School Activities
III. Administration and Supervision/Principals' Characteristics & Practices
Principals' Characteristics
Administrative Practices
Principals' Cognitions, Attitudes toward Community School & Reform
IV. Instructional / Teacher Characterstics and Practices
Background Variables
Cognitions, Perceptions & Expectations
Instructional Practices
Class Features
Classroom Activities
Supervision & Collegiality
V. Students: Achievement / Attitudes / Beliefs / Cognitions / Practices
Family Background
Out of School Work habits and Practices
Students' Cognitions, Perceptions, Attitudes, Motivation & Expectations
Achievement in Arabic. Math.Science. Life skills. Environmental Awareness. & School Grades
Classroom Interactions and Activities
Parents', Principals' and Teachers' Perceptions and Expectations of Student

References

Ahlawat, Kapur (1993). National assessment of instructional quality in basic education: An approach to address the critical issues at the tertiary stage of the baseline data phase of the study. **NCERD Document.**

Ahlawat, K., Billeh, V., Akasheh, T. and Shahbaz, M. (1994a). National survey of environmental knowledge and awareness of 8th and 10th grade students in Jordan. **Amman: NCERD Publication Series No.20.**

Ahlawat, K., Al-Nahar, T. and Billeh, V., (1994b). Assessment of learning achievement of grade 4 students in Jordan: A preliminary report. **Amman: NCERD Publication Series No.20.**

RECENT STATUS OF TEACHERS OF SPECIAL EDUCATION IN JORDAN "A DESCRIPTIVE STUDY"

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The study aimed at identifying the present status of teachers of special education in Jordanian schools, centers and special classes for the handicapped students.

The study sample consists of (365) teachers and represents (42) centers, schools and classes. It also consists of techers working with the deaf, mentally retarded, visually impaired and physically handicapped students,

All informations were collected through the central computer inventory in the ministry of social development and used several variables and professional, and personal variables (sex, age, experienc . etc.),

Results of the study reviled that 92% of the teachers are females. The majority of the qualified teachers were in other fields. but the qualified teachers in special education were 25%.

77% of teachers were covered by special in-service training programs related to the field of their work,

The study viewed that the two main problems which faced the teachers were the presence of multi handicapped children within their crass, and parents were less cooperative with the school staff in the educational programs.

Objective of this Study

This study aims at obtaining collecting data and information about situations of special education teachers to know their qualification experiences and competencies and all related subjects of preparing' teachers and rehabilitating them.

Study Procedures and Steps

This study is a descriptive study for the present situation of special education teachers in Jordan in public sector for this purpose I have et information about them from their records and files stored in central computer of ministry of social development frequencies and percent ages and the main methology in data analysis and it s results.

Introduction

Working with the disabled is a big challenge to all of us. These challenges are formed of a group of human, scientific end cultural ones. They had contributed to the development of special education in the second half of 20th century(7).

Attitudes towards the disabled have changed through time. When negative attitudes had worked the mediaeval ages through the end of 19th century. Such attitudes led to cruelly. brutality and killing them (3).

But due to concerns of various special education is like ITARD, GALLEUDET Hobbs. Coldberg, Heinz Werner and Frostg and etc., all in teaching and training of the disabled and their important role in this field had change their image in the societies (8) The 1950s and 1960s had witnessed a big progress in the rehabilitation and special education programs for the disabled.

Also the adoption of the year 1981as an international years for the disabled by the UN General Assembly a great role in this field(7).

Besides. legislations had passed in several countries to maintain the rights of education rehabilitation for the disabled es the law of education for all handicapped children in U.S.A No. 94-142 in 1975 and law learning' & Education in Britain in 1944. as well as others laws in other countries (8).

Further more the terms of special education of main streaming have spread world wide which have supported the education & rehabilitation of the disabled in all societies according to their abilities(10).

Special education is a group of individual educational methods which Include a special situation. subjects, techniques or adapted methods for their education or other rehabilitation measures aiming to achieve personal sufficiency to the disabled and his academic performance (9).

Thus, special education become an important field have enough training and rehabilitation to practice and work in it and new agencies and organizations were established to achieve these roles: programs special education teachers had to have special abilities responsibilities to achieve has role, so, preparing and training such a teacher was the outcome of a process in various countries which willing to develop their programs in special education (2).

Special education teacher is playing a big-role in teaching and training the disabled, through direct participation in the education rehabilitation process (2).

Notwithstanding that the success of an educational program depends on the Integration of the disabled in the activities which reflects his efficiency (2)

New trends in preparing special education teacher on mainstreaming and the training which based on educational efficiency and comprehensive training to make the teacher could teach in any situation competency. Based teacher education is anew trend which focuses on preparing teacher on analyzing his performance scientifically (7).

In the light of the above, one could touch the need of highly prepared and qualified cadres with high competencies has to have good altitudes towards the disabled also to accept their disabilities & them as they are (H).

During 1960s. Jordan come to take care with people with disabilities in the field of the care and welfare other than in education and rehabilitation. But by time, a good move had been achieved in special education programs for the disabled, and accompanied by several laws and legislation's were paused to confer in the disabled rights in so many fields of their life(5).

A great concern was paid to train good teachers in special education unlike before were such cadres were unqualified and unskillful. This was due to shortages in qualified teachers which lead to establish a junior college to prepare and train special education teachers called junior college of social work (Princess Brahma) in 1980, and later Jordan University launched a special education program for high diploma and M.A program in 1986 and finally the B.A program in the same university which launched in 1995 (4).

These special education programs in Junior colleges or universities reflects the deep Concerns of the government of Jordan to promote this sector. 605 teachers are being graduated since then from there this college and university (4)

Job opportunities for those graduates are the main problem facing then which forced then to look for Jobs in Gulf states very few of them joined jobs in private and public sector in Jordan (25%)

This indicates the need for more qualified teachers to join our caders of special education in our schools and centers.

(1450) staff members are working in this field in Jordan 605 of them are working with governmental schools end centers. and 365 of them are teachers while the rest are working with private sector 80% of then are working wile mentally retarted students.

In the light of that. one could differentiate 3 types as caders of special education:

1. Qualified staff and well trained staff as university professors and instructors in junior colleges. Those are composing the planing. programming and administrating the field of special education in Jordan. They are about 35 people with Ph.Ds. & MAs.
2. Specialized staff with long experience in the field. the are doing their role properly and have direct contact with the disabled like supervisors and directors of schools and centers.
3. Unspecialized staff. they and holding degrees in different fields rather than special education. They had their experience through practice and service training.

Finally one should thank agencies like queen Alia found Ministry of Social development university of Jordan, Ministry of education for conducting training courses for workers in this field to make then acquainted and acquire skills in diagnosis. behavior modification teaching, skills, guidance and counseling and learning disabilities ... etc.

This study viewed that the two main problems which faced the teachers were the presence of multi-handicapped children within their class, and parents were less cooperative with the school staff in the educational programs.

Table (1)
Shows Sex and Qualifications of the teachers

المؤهل Qu. Sex	مؤهلين Qu.		غير مؤهلين Non-Qu.		Total
	P.A/M.A	Diploma	Tawjehe	Under Tawjehe	
Male	4	19	4	1	28
Female	60	257	18	2	337
Total	64	276	22	3	365

Table (2)
Shows Sex and Experience of the teachers

EXP Sex	Experience			Total
	0 - 3 year	4 - 8 year	9 -	
Male	6	12	10	28
Female	79	104	154	337
Total	85	116	164	365

Table (3)
Shows Teacher's Sex and Impairment about it working within

King impaird Sex Tea.	Deaf	M.R	Visually	Physically
Male	7	5	18	2
Female	117	202	4	10
Total	124	207	22	12

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References

النل، امل، الكفايات الأساسية للازمة لمعلمي المعاقين، رسالة ماجستير غير منشورة، الجامعة الأردنية عمان ١٩٨٨م.

الخطيب، جمال والحديدي، منى، مناهج وأساليب تدريس في التربية الخاصة، عمّان مطبعة المعارف، الطبعة الأولى. ١٩٩٤.

الروسان، فاروق، سيكولوجية الأطفال غير العاديين: مقدمة في التربية الخاصة، عمان دار الفكر للطباعة والنشر والتوزيع، الطبعة الثانية ١٩٩٦م

الغرير، أحمد نايل، التربية الخاصة في الأردن، عمان، مطابع الدستور، الطبعة الأولى ١٩٩٥م

الغرير، أحمد نايل، الكفايات التربوية لمعلمي الأطفال المعوقين عقلياً في الأردن، رسالة ماجستير غير منشورة، الجامعة الأردنية، عمان ١٩٨٩م

السيد عبدالرحيم، فتحي، اطار سلوكي وظيفي لمعلم التربية الخاصة من العداد الى الممارسة، المجلة العربية للتربية المنظمة العربية للتربية والثقافة والعلوم، تونس، السنة الثانية، العدد الأول يناير، ١٩٨٢م

الناقة، محمود كمال، البرنامج التعليمي القائم على الكفاءات اسسه واجراءاته، مطابع الطوبخي، القاهرة، ١٩٨٧م.

سوسن مجيد، مقياس لاتجاهات المعلمين نحو المعوقين رسالة ماجستير ١٩٨٢م، جامعة بغداد.

محمد سعيد علي حسين، اتجاهات المعليمن والمعلمات في مديرية التربيية والتعليم / اربد نحو المعوقين حركياً، رسالة ماجستير (١٩٨٨) جامعة اليرموك.

Hallahan, E.F. G. Kauffman. J.M (1985). Exceptional Children. Introduction to Special education, Englewood Cliffs, New Jersey. Prentice Hall.

Heward. W.L & Orlansky, MID (1988) Exceptional Children (3rd Ed) Columns, Ohio, Charles E. Merrill.

Heward, W.L & Orlansky, M.D. (1980) Exceptional Children. Chorales. E. Merrill Publishing Company Columbus, Ohio.

DEMOCRATIC PRACTICES IN THE JORDANIAN SCHOOLS

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INTRODUCTION

This study tried to identify students' democratic practices at school and the role of the school in promoting such practices and exploring to what extent students are aware of such practices. This would help forming a clear idea about the various democratic principles which reflect students' abilities to practice democracy and oriented action. In doing so, the desired change in the future of their country in general and their own future in particular will be achieved.

The study stems out of the reasercher's faith in the importance of students and of the need to analyse their democratic practices, interactions, values, and ideas inorder to depict a clear picture of the students' community in school and difine the future of those practices because the students are the hope for a better future if they are well taken care of and they are the inevitable danger if they are neglected.

The category of students in a certain education cycle with all the characteristics of that cycle have an impact on students' decisions, attitudes, trends, and ideas. This same cycle is characterized mainly by "complexity and sensitivity because it forms a profound change in the personality features, fast growth, nervousness, emotional reaction, the desire to give with an emphasis on the self, ideal ambition, and the desire to express oneself loudly, althrough many obstacles may hinder achieving such a desire, the fact that makes students either revolt against their society or withdraw from becoming active members in it". (1)

Jordan's democratic experience is one of the most crucial in its contemporary histroy because of its political, strategic, and economic importance in the region, when his majesty King Hussien of Jordan declared the return of parliamentary life in Jordan as an initiative step to democratic life, he was so intelligent, wise , and experienced to recognize that people are the foundation, hope and future of the country and democracy is the only solution(2). Moreover, when the Jordanian charter was set down by a group of specialized Jordanians, it was like a shield to protect democracy, and a compass for the right direction. (2)

Since the return of parliamantary life in 1989 in Jordan, more attention has been given to democracy among the academic and intellectual medium and among researchers of human sciences at all levels of specializations. The Jordanian citizen derives his power from the main principle of democracy which is considered the natural environment and the feedback framework for his practices of his own human rights at various levels. Principles of democracy comprise various idiologies that pour into the philosophy of man's existance, who should be geared towards liberation, and individuality as well as integrating his "personal characteristics in society for the general welfare". (3)

Inspite of the obvious development of democracy in Jordan, the public are still not fully aware of the general concept of democracy. Students at school still reconize democracy" as a training process to elect their representatives for school councils and committees" . (4)

The main objective of practicing democracy in school life is to help students in establishing understanding, acquiring skills and values which help harmonious co-existence with others in society, the fact that will have a great impact on improving the kind of education they receive and school interaction will be reflected on their critical thinking and how to promote it. As a result of that school will become the natural environment where students acquire the values and practices of democracy which focus on working within a group and awareness of the bases, forms, and practices of democracy. This conforms with the education Act No. (3) for the year 1994 which emphasizes the importance of political education in the education system and which consolidates participation, justice and democratic practices. (5)

Many books and studies handled the concept of democracy and defined it. It was referred to demoracy in ancient times as two Greek words which consist of "Demos" which means citizens, and "Kratos" which means authority. The two combined words mean that people are the source of authority (5). Contemporarily the word "democracy" doesn't only mean the authority of people, but also "the practices of the individuals of their freedom and rights under the authority of law" (6), There are several sub-principles which are derived from the main concept of democracy. These sub-principles tackle the positive practices to which the individual is directed inorder to achieve his latent abilities for the purpose of improving his humanitrian relations in society.

Although this study isn't interested in analyzing the factors responsible for marginalizing the main concept of democracy in the general awareness of students, we can say that it is the responsibility of those who interpret democracy as a process of elections only, for this reason, there is a crucial need to enlarge the circle of democratic practices to go beyond superficial practices and become a teaching process of democratic practices which governs students' behaviors.

This study doesn't intend to explain the principles of democracy or discuss its sources, but seeks to explore the existence of such practices in school inorder to deepen students' awareness and consciousness of such practices. Democratic practices could be taught and implanted in their minds since the early stages of their education, if such practices were promoted and provided with a dequate support through introducing all principles related to democratic practices in daily school life.

Questions of the study

The study tried to answer the following questions :

- What are the democratic practices which students practice at school?
- Do demoratic practices differ according to sex and academic streams (literaryl / scientific)?

What are the students' suggestions for developing democratic practices in school?

Importance of the study

The importance of this study lies in detecting the democratic practices of students in secondary schools in Jordan (in order to identify such practices) which are strongly related to the social, cultural and political changes which Jordan is witnessing at the present time, especially in the demoratic sphere and political pluralism. However, the

Jordanian school curricula tackled the issue of demoratic principles and their practices before the current peace process in the Middle East because "Al-Quraan" implies applying shoura "democracy" and human rights which are exemplified in the principles and fundamentals of Islam.

Although, there are many local studies which investigated the content of school curricula and its relation to democracy in various educational cycles in Jordan, this study is yet different in its objectives, questions, and methodology. For this reason, there is still a need for the educational and social researchers to analyze school curricula and relate it to democratic practices inorder to findout how such principles could be empirically applied among students.

Study Objectives

This study aims to investigate the : (1) the democratic practices of students at schools in Jordan and the way to promote them, (2) the contribution of gender and academic streams to democratic practices, (3) suggestions to help educational planners to relate curricula promoting demcoratic practices at school.

Study Procedures

To achieve the objectives of this study, the following procedures were taken regarding the population of the study, the selected sample, the tool to collect data, and the statistical analysis:

Study population

It consisted of the secondary schools in the educational directorates of greater Amman (1) and (2).

Study Sample

It consisted of 100 students in the secondary schools of the educational directorates of greater Amman (1) , and (2), for the year 1995/1996. The following procedures were taken in selecting the sample of the study.

Twenty - five male students and twenty - five female students were randomly chosen from the scientific stream of two secondary schools of the educational directorate of greater Amman (1).

Twenty - five male students and twenty-five female students were randomly chosen from the literary stream of two secondary schools of the educational directorate of greater Amman (2).

The collected data was entered in the computer for statistical analysis.

Study tool

To answer the questions of the study, a questionnaire was designed for this purpose as follows :

The first part of the questionnaire consisted of 30 items which handle the democratic practices derived from the sub-principles of democracy. These sub-principles tackled the positive practices to which students are supposed to be oriented inorder to achieve their latent abilities which in turn improve human relations in the students' environment.

After referring to the literature related to the main principle of democracy, the following sub-principles were included, which if applied practically can promote the democratic practices. These sub-principles were distributed to the items of the questionnaire as follows :

- First topic : elections, items (1,2,3,4).
- Second topic : intellectual pluralism, items (5,6).
- Third topic : respect of individual personality, items (7,8,9).
- Fourth topic : cooepration for the welfare of the group, items (10,11,12,13).
- Fifth topic : cooperation within the group, items (14,15)
- Sixth topic : national loyalty, items (16,17,18,19).
- Seventh topic : learning the democratic ideals through classroom interactions, items (20,21,22,23,24).
- Eight topic : using the scientific thinking in problem solving, items, (25).
- Ninth topic : having faith in scientific progress, items (26).
- Tenth topic : promoting self - confidence, item (27).
- Eleventh topic : having faith in the value of work, items (28,29).
- Twelfth topic : promoting challenge spirit, items (30).

To answer the second question of the study, the significant differences between sex and academic stream can be measured by using (T-test).

To answer the third question of the study, the second part of the questionnaire handled students' suggestions on how to promote the democratic practices at school and it was measured by number of frequencies and percentages.

The scale of students' responses on the questionnaire items consisted of three levels as follows :

1- high
2- moderate
3- Low

The questionnaire was judged by a team of trustees from the Ministry of Education headquarters & outside, all specialized in education, and it was approved in its final form according to their opinions.

Statistical Analysis

To answer the questions of the study , the means and standard deviations of the answers of the study sample were calculated A (T-test) was conducted to find out if there are any significant statistical differences of students' responses to the questionnaire on the democratic practices according to the variables of sex and academic stream (literary / scientific). A frequency and percentage analysis was used to analyse students' suggestions for develoing democratic practices in school.

Study Limitations

The results of this study cann't be generalized beyond the educational directorates of greater Amman (1), (2).

Result of the Study

This study aimed at investingating the democratic practices of students at schools in Jordan and the way to promote them. The results of the study were as follows :

The results regarding the first question : What are the democratic practices which students practice at school?

* Regarding the first topic concerned with choice (elections) The results showed that the means and standard deviations were as shown in table No. (1) in decending order.

Table No. (1)
The means and standard deviations of students responses on choice (elections)

Serial no.	No. of item	Items	Means	SD
1	1	I have the right to be nominated for school committees.	2.50	.69
2	2	I have the right to vote in school committees	2.31	.81
3	4	I have the opportunity to be invoived in school activities which suit my interests & desires.	2.27	.75
4	3	I have the opportunity to attend students' meetings inside the school	1.65	.73

Table No. (1) shows that the mean of responses on topic (1) was moderate, it was (2.18). It is noticed that the mean of item (1) was high, it was (2.50) and the means of items (2), (4) were moderate, they were (2.31) , (2.27), while the mean of item (3) was low, it was (1.65).

* Regarding the second topic which concerned with intellectual pluralism. The results showed that the means and standard deviations were as shown in table No. (2) in descending order.

Table No. (2)
The means and standard deviations of students' responses on intellectual pluralism.

Serial No.	No. of Item	Items	Means.	SD.
5	5	I accept and respect any colleagues' various ideas and improve them.	2.65	.56
6	6	My teachers and colleagues accept and respect my ideas.	2.16	.63

Table No. (2) shows that the mean of responses on topic (2) was moderate, it was (2.41). It is noticed that the mean for item (6) was , Mulerate. it was (2.16), while the mean for item (5) it was (2.65).

- Regarding the third topic concerned with respecting individual personality. The results showed that the means and standard deviations were as shown in table No. (3) in descending order.

Table No. (3)
The means and standard deviations of students' responses on respecting individual personality

Serial No.	No. Item	Items	MS	SD
7	8	I appreciate the distinquished characteristics in others' personalities	2.57	.65
8	9	My awareness of the value of my character estics as well as other's develop and I don't try to develop them.	2.55	.64
9	7	The others appreciate the distinguished characteristics in my personality.	2.13	.71

Table No. (3) shows that the mean of responses on topic (3) was moderate, it was (2.42). The means of items (8), (9) were high, they were (2.57) & (2.55). While the mean of item 7 was moderate, it was (2.13).

- Regarding the fourth topic concerned with cooperation for the welfare of the group. The results showed that the means and standard deviations were as shown in table (4) in descending order

Table No. (4)
The means and standard deviations of students' responses on cooperation for the welfare of the group

Serial No.	No. Item	Items	Means	SD
10	12	I care about the comments and opinion of the group leader	2.56	.59
11	13	I make use of the time given for discussion	2.35	.72
12	11	I give up my personal desires for the welfare of the group.	2.33	.62
13	10	I have the opportunity to discuss general issues	1.73	.76

Table No. (4) shows that the mean of responses on topic (4) was moderate, it was (2.24). It is noticed that the mean of item (12) was high , it was (2.56), and the means for items (13) & (11) were, moderate they were (2.35) & (2.33), while the mean of item (10) was low, it was (1.73).

- Regarding the fifth topic concerned with cooperation within the group. The results showed that the means and standard deviations were as shown in table (5) in descending order.

Table No. (5)
The means and standard deviations of students' responses on cooperation within the group

Serial No.	No. Item	Items	Means	SD
14	14	I interact and share my colleagues in various educational activities inside and outside the school.	2.03	0.73
15	15	I interact and participate with my colleagues in various social activities inside and outside the school.	1.90	.73

Table No. (5) shows that the mean of responses on topic (5) was low, it was (1.97). It is noticed that the mean of item (14) moderate, it was (2.03), while the mean of item (15) was low, it was (1.90).

* Regarding the sixth topic which is on National Loyalty the results showed that the means and standard deviations were as shown in table (6).

Table No. (6)
The means and standard deviations of students' responses on national unity

Serial No.	No. Item	Items	Means	SD
16	19	I care about the different issues of my society's members regardless of their race, religion, and abilities.	2.31	.77
17	18	I get involved in voluntary work individually or within a group.	1.95	.74
18	16	My school gives me the opportunity to learn about our heritage and the history of our country & its role in civilization.	1.71	0.70
19	17	My school gives me the opportunity to learn about various other multi- cultures.	1.71	0.70

Table No. (6) shows that the mean of responses on topic (6) was low, it was (1.92). It is noticed that the means of items (18), (16), (17) were low, they ranged between (1.95 - 1.71).

* Regarding the seventh topic which is no learning the democratic ideas through classroom interactions. The results showed that the means and standard deviations were as shown in table No. (7) in descending order.

Table No. (7)
The means and standard deviations of students' responses on learning the democratic ideals inside classroom interactions

Serial No.	No. Item	Items	Means	SD
20	20	I listen carefully when others talk	2.71	.54
21	24	Iam offered proper directives to carry out my responsibilies.	2.27	.68
22	21	Others listen to me carefully when I talk.	2.14	.65
23	23	I comment positively about differnt issues.	2.02	.74
24	22	I have the opportunity to practice different activities that I like.	1.84	.76

Table (7) shows that the mean of responses on topic (7) was moderate, it was (2.20). It is noticed that the means of items (24), (21), (23) were moderate, ranging between (2.27-2.02), while the mean of item (20) was high , it was (2.71). It is also noticed that the mean of item (22) was low, it was (1.84).

- Regarding the eighth topic which is on using scientific thinking in problem solving. The results showed that the means and standard deviations were shown in table No. (8) in descending order.

Table No. (8)
The mean and standard deviation of students' responses on using the scientific thinking in problem solving

Serial No.	No. Item	Items	Means	SD
25	25	I have the opportunity to think in a scientific way to solve my problems.	1.96	.75

Table No. (8) shows that the mean of responses on topic (8) was low, it was (1.96).

- Regarding the ninth topic which is on having faith in scientific progress. The results showed that the mean and standard deviation were as shown in table No. (9).

Table (9)
The mean and standard deviation of students' responses on having faith in scientific progress

Serial No.	No. Item	Items	Means	SD
26	26	I believe in the importance of scientific discovery and in keeping pace with scientific progress and development.	2.64	.64

Table No. (9) shows that the mean of responses on topic (9) was high, it was (2.64).

- Regarding the tenth topic concerned with promoting self - confidence. The results showed that the mean and standard deviation were as shown in table No. (10).

Table No. (10)
The mean and standard deviation of students' responses on promoting self - confidence

Serial No.	No. Item	Items	Means	SD
27	27	I contribute in suggesting successful solutions to students' problems.	2.26	.66

Table No. (10) shows that the mean of responses on topic (10) was moderate, it was (2.26).

* Regarding the eleventh topic which is on having faith in the value of work. The results showed that the means and standard deviations were as shown in table (11) in descending order.

Table No. (11)
The means and standard deviations of students' responses on having faith in the value of work

Serial No.	No. Item	Items	Means	SD
28	28	I have the opportunity to choose the profession which I like.	2.19	.79
29	29	I have the opportunity to change my profession choice.	2.08	.82

Table No. (11) shows that the mean of responses on topic (11) was moderate, it was (2.14).

* Regarding the twelfth topic which is on promoting the spirit of challenge. The results showed that the mean and standard deviation were as shown in table (12).

Table No. (12)
The mean and standard deviation of students' responses on promoting the spirit of challenge

Serial No.	No. Item	Items	Means	SD
30	30	I practice activities which encourage me to discover ambiguities, suspect in knoweldge and try to find out facts.	1.76	.74

Table No. (12) shows that the mean of responses on topic (12) was low, it was (1.76).

- The results regarding the second question: Do democratic practices differ according to sex and academic streams (Literary/scientific)?

To answer this question, the means of students' responses were calculated, and a (T-test) was used to find out if there is a significant statistical difference among them.

Table No. (13) shows the means of students' responses and the value of (T-test) and its significance according to sex.

Table No. (13)

The means of students' responses on the questionnaire of democratic practices, and the value of (T-test) and its significance according to sex.

Sex	Means	T-Value	Significance
Males (No = 50)	65.44	.24	.813
Females (No = 50)	65.04		

Table No. (13) shows that there is no signficant statistical difference among students responses on the questionnaire of democratic practices could be attributed to sex.

Regarding the statistical differences according to type of academic education for both literary and scientific streams, table No. (14) shows the means of students' resonses on the questionnaire of democratic practices, and the value of (T-test) and its significance.

Table No. (14)

The means of students' responses on the questionnaire of democratic practices, and the value of T-testand its significance according to type of academic education

Type of academic education	Means	(T) value	Significance
Scientific stream No. = 50	68.24	3.81	.001
Literary stream (No = 50)	62.24		

Table No. (14) shows that there is a significant statistical difference betweeen the literary and scientific streams in favour of the scientific stream.

* The results regarding the third question : what are the students' suggestions for developing democratic practices in school?

Through the survey conducted of students to find out their opinions and suggestions in the way of promoting and enhancing democratic practices at school, the results were as shown in table No. (15).

Table No. (15)
Students' opinions and suggestions related to promoting democratic practices at school in descending order.

No	Suggestions	No of students (N = 100)	
		Frequency	%
1-	Having teachers and students respect one another's opinion	72	72
2-	Increasing the school principal's acceptance of students' opinions and suggestions.	57	57
3-	Activating the role of students' council and school committees in school leadership.	41	41
4-	Activating meetings a mong students, teachers, and administrative staff.	40	40
5-	Activating the school's various activities continuously.	37	37
6-	promoting innovation spiriti and critical thinking in students.	28	28
7-	Taking into consideration students' opinions and suggestions when designing curricula and organizing school tests.	25	25
8-	Holding seminars and giving lectures to both teachers and students on developing democratic practices.	25	25
9-	Taking into consideration students' opinions in evaluating teachers' educational performance.	24	24
10-	Activating the role of the school in organizing scientific trips and exploring visits to scientific sites, inorder to show them the current scientific progress.	22	22
11-	Forming a Committee from the Educational Directorates to supervise students' councils so as to study their problems.	14	14
12-	Giving lectures to students about the national heritage and other heritage patterns.	12	12
13-	Consolidating cooperation and communications among students from all schools.	12	12
14-	Activating the role of school broadcasting handling different issues.	11	11
15-	Taking into account students' desires when distributing them on the various academic and vocational streams, and giving them a chance to change their streams if possible.	10	10

Table No. (15) shows that the frequencies and percentages of students' suggestions and opinions to promote democratic practices at school were moderate. They ranged between (10%-72%). It is indicated that most of the suggestions focussed on having teachers and students respect one another's opinion, the percentage was (72%), followed by the second suggestion of increasing the school principal's acceptance of students' opinions and suggestions which was (57%).

Suggestions No : (3), (4), (5), ranged between (37& - 41%) and concentrated on the following important issues :

- Activiting the role of students' councils, and school committees in school leadership.
- Activting meetings among students, teachers, and administrative staff.
- Activating the various activities of the school continuously.

Suggestions No : (6), (7), (8), (9), (10), were of less importance to students, and they ranged between (22% - 28%), while the least importance was given to suggestions No :

(11), (12), (13), (14), (15) which ranged between (10%-14%) as indicated in the previous mentioned table.

Discussion of the Results

This study aimed to investigate the democratic practices of students at schools in Jordan and the way to promote them.

* Regarding the first question : what are the democratic practices which students practice at school?

It is clear that the responses of students on the items of elections were high, the mean was (2.50) which means that the schedual gives students the chance to practice elections of students' councils and school committees. While the mean responses on giving the chance to students to hold meetings was low, it was (1.65) which necessitates a more positive role of school to develop students' sense of resonsibility towards the group welfare.

* Regarding the items on intellectual pluralism, the responses were moderate, the mean was (2.41). This necessitates activating the role of school to develop the spirit of intellectual freedom in students in order to be capable to :
    - express their thoughts freely and work on improving them.
    - accept and respect each others opinions.

Regarding the items on respect of individual personality, the responses were moderate, the mean was (2.42). This necessitates activating the role of school to promote student's individual personality a fact which improves his/her sense of equality with others which in turn consolidates the spirit of loyalty to the group and the desire to share with others in various school activities, and as a result, learning becomes meaningful to students'.

- Regarding the item on cooperation for the benefit of the group, the responses were moderate. The mean was (2.24), while it was (1.73) for item (13) which is on giving opportunity to the student for discussing general issues. This necessitates activating student discussions to develop the sense of general benefit, with the aim of reducing violence and clinging to individual opion, thus brining about general rest.

- Regarding the items on cooperation within the group, the responses were low , the mean was (1.97). This necessitates the contribution of the school in developing interaction and sharing with the group in various activities and social skills inside and out side the school.

- Regarding the items on national loyalty, the responses were low, the mean was (1.92) . This necessitates a more active role of the school to develop the sense of loyalty in students at the school community, and national society levels, through developing the democratic practices related to national loyalty.

- Regarding the items on learning the democratic ideals through classroom interaction, the responses were moderate, the mean was (2.20). This necessitate role of relationship between the school and students in developing the patterns of ideal living and applying the democratic practice. This, in turn, related to the extent of the educational procedures taken, and classroom interaction management.

- Regarding the items on using scientific thinking in problem solving, the responses were low, the mean was (1.96). This could be related to the importance of materials which have to be included in school curricula to teach students the scientific approach in problem-solving which consists of defining the problem, derivising solutions, and choosing the most suitable solution. This, in turn, will develop the student's intelligence in solving his/her problems and cope with the changing environment in a balanced way of living.

- Regarding the items on having faith in scientific progress, the responses were high, the mean was (2.64). This indicates the role of school and curricula in promoting students' faith in scientific inventions, technology, and developing faith in the ability to control the factors of environment. This leads to improving students' view towards humanity and directing it for the general welfare.

- Regarding the items on promoting self-confidence, the responses were moderate, the mean was (2.26). This could be related to what is offered to students at school, such as , activities, homeworks, social problems that create self - confidence in one's self after having students try to perform or solve them. As a result, general rest and self confidence will prevail among students and teachers.

- Regarding the items on having faith in the value of work, the responses were moderate, the mean was (2.14). This necessitates activating the role of school to promote the spirit of professional affiliation in students and making the necessary changes in the individual's life inorder to develop a profession or change it, a fact that will (upgrade the individual's standard of living) and improve the general outcome of society.

- Regarding the item an promoting the spirit of challenge, the responses were low, the mean was (1.76). This could be related to the methodological and non-methodological activities given by school to students that instigate the spirit of exploration about ambiguities and suspect in knowledge until proven true inorder to find out facts.

- Regarding the second question : Do democratic practices differ according to sex and type of academic education (literary and scientific streams)?.

As regards the sex variable there were no differences of statistical significance in the field of democratic practices, which indicates the generalization of those practices, as shown in Table No. (13).

As regards the variable of academic education there were differences of statistical significance in favour of the scientific stream, as shown in Table No. (14), which indicates that students in the scientific stream are more understanding and accepting of their school environment, and this has a positive reflection on their democratic practices.

* **Regarding the third question :** What are the Students' suggestions for developing democratic practices in school?

Table No. (15) clarifies that they rated moderately ranging between 10%-72%. The first item on mutual respect of opinion between students and teachers rated they highest, which necessitates creating constructive and meaningful dialogue based on mutual respect.

The second item on increasing acceptance of students' opinions and suggestions by the school administration ranked second, 57% of the respones. This necessitates opening constructive dialogue based on mutual respect between the students and school administration. The third item on activating the role of the students councils and school committees ranked third, 41% of the responses.This indicates the importance of activating the role of students councils and school committees as an efficient connecting link between the school administration and teachers on one hand and the students on the other hand, with the aim of finding solutions to student problems. Item four on activating student - school staff meetings ranked fourth, 40% of the responses. This indicates the importance of open meetings among the students, teachers, and principals, with the aim of narrowing the gaps and finding solutions to problems concerning students, teachers, and administrators. Item five on activating various school activities all round the academic year ranked fifth, 37% of the responses. This indicates that school activities are insufficient and should be activated.

The table also indicates that items 6, 7 ,8, 9, 10 are close in responses, ranging between 22% - 28%. This indicates the need for developing creativity and critical thinking in students and for participating in evaluation of school curricula as a part of planning, and for giving the student a more important role in organizing school exams. In addition , there is need for student meetings and seminars to consolidate democratic concepts and their positive reflections on student behavriour and in turn on school discipline, as well as academic achievement. Moreover, there is a need to take into account students' opinions in evaluating the educational performance of teachers, a fact that will be reflected on school reform. On the other hand, organizing scientific trips is a need for students to make them a ware of the latest scientific progress achieved on local and international levels.

The table also indicates that items 11,12,13, 14,15 are close in resonses, ranging between 10% - 14%. This indicates the need to develop direct relationship between students and educational directorates to follow-up crucial issues related to students, inaddition, there is a need to include in the curricula more concepts that deepen home land - affiliation and world dimension in students through teaching the national heritage

and others. It also indicates the need for more communications among students from all schools, and a more active role in the school broadcasting for cultural and desirable purposes. On the other hand, it indicates the need to take into consideration the student's desire to choose his/her academic or vocational stream according to needs arising in his life, a fact that will be positively reflected on solving problems related to unemployment and a better standard of living.

CONCLUSIONS

* As regards to democratic practices at school, it is clear that the responses of students were low and not up to the required level in the following practices :

- Organizing meetings inside the school.
- Participating in discussing general issues.
- Interacting and sharing in various social activities inside and outside the school.
- Being involved in voluntary work individually or within a group.
- Learning about the heritage and history of one's country and its role in civilization.
- Learning about various other cultures.
- Practicing various desired activities.
- Thinking in a scientific way to solve problems.
- Practicing activities that encourage discovering ambiguities, suspecting in knowledge, and finding out facts.

On the other hand, the responses of students were moderate but not up to the required level in the following practices:

- Voting in electing school committees.
- Practicing school activities that are suitable to students' capabilities and interests.
- Accepting and respecting student's ideas.
- Appreciating the distinguished characteristics in the students' personality.
- Making use of the time given for discussion.
- Giving up personal desires for the welfare of the group.
- Interacting and sharing in various school activities in side and outside the school.
- Caring about the different issues of society's members regardless of their race, religion, and abilities.
- Offering proper directives to carry out one's responsibilities.
- Listening to the student while he/she is talking.
- Commenting positively about different issues.
- Offering suggestions for successful solutions to students' problems.
- Choosing the profession which the student likes.
- Changing the profession's choice.

However, the responses of students were high in the following practices :

- Being nominated for school committees.
- Accepting and respecting his/her colleagues' various ideas and improve them.
- Appreciating the distinguished characteristics in the personalities of his/her friends.
- Developing awareness of the value of his/her characteristics as well as of others and trying not to devalue them.
- Caring about the comments and opinion of the group leader.
- Having faith in the importance of scientific discovery and in keeping pace with scientific progress and development.

* No statistical significant difference was found in the responses of students which could be attributed to sex.

- * There is a statistical significant difference in the responses of students that could be a ttributed to the academic streams and infavour of the scientific stream.

- * The need to take into considration students' suggestions which mainly focussed on :

  1- Respecting opinions among teachers, students, and school administration.
  2- Activating the role of students' councils in school leardership.
  3- Relating the role of school broadcasting to more important issues on a cultural and social level.
  4- Activating meetings and seminars among teachers, students, and school administration.
  5- Activating social activities at school which encourage giving lectures by intellectuals.
  6- Developing school curricula and in particular civics in order to meet students' needs.

RECOMMENDATIONS

Through the results of the study, the researcher recommends the following :

1- Focusing on promoting a more positive relationship between students and teachers at school through holding meetings to discuss any problem that may hinder the teaching/learning process.

2- Encouraging school principals to give a chance to students in expressing their opinions about various issues that may reveal students' needs and desires, as well as enhancing their attitudes towards democratic practices at school.

3- Allowing students to participate in evaluating school curricula as a part of planning.

4- Encouraging school administrations to take into consideration students' opinions in evaluating teachers' educational performance for the purpose of reform.

5- Including more democratic concepts in school curricula and in particular civics.

6- Holding meetings and seminars about democratic practices at school and making students and teachers aware of their importance to the educational process.

7- Forming committees from the educational directorates to follow up student councils inorder to find solutions to school problems arising among students, teachers and administrators.

References

Al-Buhi, Faroug. Daweger, Laila, (1995), "Realization of the Basic Traits of Arab personality by the students of Bahrain University, and ways of Maintaining them ". Arab Journal for Higher Education. Tunisia, First Edition. Dec. 1995

Darweesh, Saed. (1990) " The New Democratic Phase in Jordan, Discussion Datails & Confidence Government Vote ", Arab Foundation for publishing & Studies . Beirut, First Edition . PP . 16, 140 .

Gulezian, Ane. " Translated from Teaching in the Secondary School " Teachers' Message . Issue No. 3 . Vol.36 Sept. 1995 PP. 107-112.

Al-Rawabdeh, Abdul Raof, (1996), " Education we want ", Showman Cultural From Seminar, Amman, 1996, PP .14 .

Ministry of Education, (1994) Education Act No.3, General Directorate of Educational Planning, Research and Development, Amman- Jordan .

Al-Rawabdeh, Abdul Raof, (1992) Democracy between Theory & Application , Amman, First Edition, PP.7.

Annex (1)

No	Items	high	Moderate	Low
1-	I have the right to be nominated for school committees			
2-	I have the right to vote in school committees			
3-	I have the opportunity to attend students' meetings inside the school.			
4-	I have the opportunity to get involved in school activities which suit my interests a desires.			
5-	I accept and respect my colleagues' various ideas and improve them.			
6-	My teachers and colleagues accept and respect my ideas.			
7-	The others appreciate the distinguished characteristics in my personality.			
8-	I appreciate the distinguished characteristics in others' personalities.			
9-	My awareness of the value of my characteristics as well as of others develops and I don't try to devalue them.			
10-	I have the opportunity to discuss general issues.			
11-	I give up my personal desires for the welfare of the group.			
12-	I care about the comments and opinion of the group leader.			
13-	I make use of the time given for discussion			
14-	I interact and participate with my colleagues in various educational activities inside & outside the school.			
15-	I interact and participate with my colleagues in various social activities inside & outside the school.			
16-	My school gives me the opportunity to learn about our heritage and the history of our country & its role in civilization.			
17-	My school gives me the opportunity to learn about various other cultures.			
18-	I get involved in voluntary work individually or within a group.			
19-	I care about the different issues of my society's members regardless of their race, religion, and abilities.			
20-	I listen carefully when others talk			
21-	Others listen to me carefully when I talk			

Cont. Annex (I)

22-	I have the opportunity to practice different activities that I like.			
23-	I comment positively on different issues			
24-	Iam offered proper directives to carry out my responsibilities.			
25-	I have the opportunity to think in a scientific way to solve my problems.			
26-	I believe in the importance of scientific discovery and in keeping pace with scientific progress and development.			
27-	I contribute in suggesting successful solutions to students' problems.			
28-	I have the opportunity to choose the profession which I like.			
29-	I have the opportunity to change my profession choice.			
30-	I practice activities which encourage me to discover ambiguities, suspect in knowledge and try to find out facts.			

PROMOTING TEACHING AND LEARNING EFFICIENCY

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INTRODUCTION

General objectives of education are : developing cognitive abilities, basic skills, scientific method in research and problem - solving (Jaradat & others, 1984). Building balanced personalities in students, capability of decision - making and analyzing data for validity are needed (Education Act No. 3, 1994).

Therefore the educational medium has enevearored to enhance the teaching / learning process through holding training courses, seminars, and conducting studies, all confirming the necessity of using modern teaching methods (First National Conference for Educational Development, 1987).

(Al-Qudah and others, 1995); Al-Qudah, 1991; Al-Khatib, 1985; Al-Waqfi, 1980). Emphasis was also placed on diversification in evaluation methods, exam questions which focus on problem - solving and critical thinking rather than memorization (Morton, 1972; Thomas, 1980; Al-Qudah, 1991; Mutawei, 1985; Mahmoud, 1982).

In spite of the fact that the study results confirmed the above and the participants in the Conference recommended it, yet teaching efficiency is not yet to the level of helping students in developing self - learning or critical thinking. Teaching methods are still traditional(Al-QudaHandOtherS1995,Al-QudaH;1991;ALKTIB;1976;TahaHussein;1933 and examinations are an end rather than a means (Al-Quda, 1991; Hindawi, Al-Farah, 1987). Students rarely study outside material (Ulaimat, 1988; Al-Qudah, 1991), and their students are weak (Khater, 1989; Miqdadi and Tall, 1989). examination still focus on minimum student knowledge (Al-Qudah, 1991, Ulaimat, 1988) and ignore skills , habits, values and various methods of thinking (Mutawei, 1985; Al-Qudah, 1991).

Based on the above perceptions, it is clear that tackling the breaches in the teaching/ learning process in Jordan, cannot be achieved, according to the researcher, in islolation of educational studies and research.

Study purpose and questions

This study aims to find out the weakneses and breaches in teaching and evaluation methods used by higher basic and secondary cycle teachers and their causes, from the point of view of supervisors of various study subjects to improve the teaching / learning process.

This study answers the following questions :

1- Do teachers use modern teaching methods ?
2- Do most exam questions focus on memorizing facts, knowledge, and information?
3- Do exam questions encourage scientific thinking and focus on discovering the abilities and talents of students ?
4- Do teachers diversify in evaluation methods during the teaching/ learning process ?
5- Why do teachers ignore evaluation methods other than testing?
6- Why do teachers rarely diversify in evaluation methods of testing ?

7- What are the obstacles facing the teachers in using modern teaching methods ?
8- What are the obstacles facing the teachers in using diversified evaluation methods ?

The importance of the study :

The importance of the study lies in the following :

- It is a scientific methodological study in the field of improving modern teaching methods and diversified evaluation methods used by teachers in Jordan, which is crucial to developing the problem - solving method and critical thinking of students.
- It helps those responsible for the teaching / learning process in Jordan to set down remedial plans for solving problems which hinder teachers from using modern teaching methods and diversified evaluation methods.
- It enriches the literature on Arab educational researches.

The limitations of the study :

The limitations of the study are the following :

- This study was restricted to the supervisors of the various subjects in the directorates of education in Jordan in 1995/1996.
- The results of this study are limited by the validity and reliability of its instrument.
- The generalization of the results of the study is restricted to the place environment in which it was applied, or other similar environments.
- Regarding promoting the efficiency of teaching and learning, this study is limited by teaching and evaluation methods used by teachers during the academic year 1995/96

Methods and procedures

The study population and sample

The study population constituted the supervisors of the various subjects in the directorates of education in Jordan in the academic year 1995/96. A random sample was selected from the study population, clarified in Table No. (1) as follows :

Table No. (1)

Number of the Study Sample Individuals of the Supervisors of Various Subjects in the Directorates of Education in Jordan in the Academic year 1995/1996

No.	Directorate	No. of Supervisors
1-	Ajloun	20
2-	Irbid (1)	27
3-	Zerqa	16
4-	Amman(1)	37
	Total	100

Study Procedures :

The study followed the following procedures :

- The researcher prepared a questionnaire to survey the opinions of educational supervisors on teaching and evaluation methods which secondary education teachers used in the academic year 1995/96.

- The Directorate of Educational Studies and Research addressed the field directorates of education in which the questionnaire was applied to facilitate the work of the researcher.

- The questionnaire was applied on the educational supervisors included in the study.

- The data in the questionnaires was analyzed by the researcher manually in order to know the opinions of the educational supervisors on the items of the questionnaire.

Study instrument

A questionnaire was designed to know the opinions of educational supervisors on teaching and evaluation methods used by teachers during the teaching/ learning process for students in secondary schools in Jordan. The questionnaire consisted of (8) items. The responder had to tick his right choice and was allowed to tick more than one choice for each item. The questionnaire was judged by a board of trustees specialized in education and Arabic language and it was approved in its final form (see annex No. (11).

To test the reliability of the questionnaire, it was applied on a preleminary sample and its value was (70).

Statistical treatment

Statistical treatment was carried out by using frequencies and percentages after preparing a table clarifying the responses of the sample individuals on each item of the questionnaire.

The Results of the Study and discussion

Regarding the first question on teachers using modern teaching methods, the questionnaire was directed to educational supervisors and the following results came out :

a- The number of supervisors who answered (No) reached 82, with a percentage of 82%.

b- The number of supervisors who answered (Yes) reached 18, with a percentage of 18%.

It is noticed that teachers don't use modern teaching methods. This is confirmed by the educational supervisors, whereby their answers rated 82% . This result conforms with the results of several other studies (Al-Qudah and others 1995; Al-Qudah, 1991 ; Al-Khatib, 1985; Al-Zoubi, 1985; Al-Waqfi, 1980).

The supervisors attribute this result to the following reasons; according to frequencies and percentages, as shown in Table No. (2). They are listed in order of importance.

Table No. (2)
Distribution of opinions of supervisors on teachers not using modern teaching methods

Item no.	Subject	Frequency	%
e-	Don't use modern teaching methods	68	82.92
c-	Don't use critical thinking	60	73.17
d-	Don't diversify in teaching methods	58	70.73
a-	Foucs on explaining and dictating while teaching	55	67.07
b-	Don't take into consideration individual differences	50	60.98

The above table indicates that all reasons confirm that teachers don't use modern teaching methods, according to the supervisors' opinions, although there are differences in percentage among them, the minimum being (50%).

Regarding the second question on most exam questions foucssing on memorizing facts, knowledge, and information, the questionnaire directed to educational supervisors included a question on the subject and the following results came out :

a- The number of supervisors who answered (Yes) reached 89, with a percentage of 89%.

b- The number of supervisors who answered (No) reached 11, with a percentage of 11%.

It is noticed that most exam questions foucs on memorizing facts, knowledge, and information , whereby the answers rated 89%. This conforms with several other studies (Al-Qudah, 1991; Mutaweh, 1985; Mahmoud, 1982; Thamos , 1980; Morton, 1972).

The supervisors attributed this result to causes listed in their order of importance according to frequencies and percentages.

Table No. (3)
Distribution of supervisors' opinions on causes of exam questions focussing on memorizing facts, knowledge and information

No.	Subject	Frequencies	%
e-	Higher levels of knowledge development	86	96.63
d-	Various thinking methods	85	95.50
a-	Skill the student learnt	83	93.26
b-	Interests	67	75.28
c-	Trends and values	65	73.03

The above table indicates that the five items mentioned in it are highly ignored according to the study sample individuals. The maximum rate was 96.63% and the minimum 73.03% .

Regarding the third question included in the questionnaire on developing scientific thinking and focussing on discovering abilities and talents of students, the results were as follows :

a- The number of supervisors who answered (Yes) reached 5, with a percentage of 5%.
b- The number of supervisors who answered (No) reached 95, with a percentage of 95%.

It is noticed that exam questions don't encourage scientific thinking or focuss on discovering students' abilities and talents, whereby the answers rated 95%. This conforms with some other studies (Al-Khatib, 1985; Al-Waqfi, 1980).

The individuals who responded negatively on this question attribute it to the following reasons, in order of importance, according to frequencies and percentages, as clarified in Table No. (4):

Table No. (4)
Distribution of opinions of educational supervisors on the causes of rare encouragement of scientific thinking and focus on discovering students' abilities and talents through exam questions

No.	Subject	Frequency	%
a-	Most exam questions rely on memorization only	90	94.74
c-	Lack of questions which measure various cognitive abilities	88	92.63
d-	Restriction to the textbook	86	90.53
b-	Lack of questions which relate to scientific thinking	80	84.21

The study sample individuals attributed the rareness encouragment of scientific thinking and foucss on students' abilities and talents in exam questions to the four reasons mentioned above because of the 80%-90% range, which is high .

Regarding the fourth question on diversification in evaluation methods, the questionnaire which was directed to the supervisors included a question aiming to know their opinions, and the results were as follows :

a- The number of supervisors who responded positively was 28, with a percentage of 28%.

b- The number of supervisors who responded negatively was 72, with a percentage of 72%.

This confirms that there is no diversification in evaluation methods during the teaching/learning process, whereby the responses were 72%. This result conforms with Al-Qudah's study, 1991.

The supervisors attribute this result to the following reasons, in order of importance and according to the frequencies and percentages, as clarified in Table No. 5.

Table No. (5)
Distribution supervisors' opinions on the causes of teachers not diversifying in evaluation methods

Item No.	Subject	Frequency	%
a-	Ignoring non-testing evaluation methods such as personal records and accumulative records (Student card).	65	90.28
b-	Rare diversification in testing evaluation methods	55	76.39

Table No. (5) indicates that teachers are not interested in non-testing evaluation methods, and at the same time they rarely diversify in testing evaluation methods, whereby the percentages were 90.28% and 76.39% respectively.

Regarding the fifth question on the causes of teachers ignoring non- testing evaluation methods, the questionnaire directed to the supervisors included a question of five sub-items and the responses are indicated in Table No. 6 in order of importance according to frequencies and percentages :

Table No. (6)
Distribution of opinions of supervisors on the causes of ignoring non-testing evaluation methods by teachers

Item No.	Subject	Frequency	%
b-	Writing researches	55	84.62
c-	Writing working papers	50	76.92
e-	Accumulative records (student card)	45	69.23
d-	Personal records	42	64.62
a-	Writing reports	40	61.54

The table indicates that teachers are not interested in non-testing evaluation methods, as the responses were higher than 61.54. This result conforms with the results of Al-Qudah's study, 1991.

Regarding the Sixth question on the causes of little diversification in testing evaluation methods, the questionnaire which was directed to supervisors included a question of three sub-items and the responses are indicated in Table No. (7), in order of importance and according to frequencies and percentages :

Table No. (7)
Distribution of opinions of supervisors on the causes of rare diversification in testing evaluation methods by teachers

Item No.	Subject	Frequency	%
a-	Focus on written tests	50	90.9
b-	Don't use practical tests	45	81.82
c-	Don't use oral tests	40	72.73

The table indicates that written tests ranked first for reasons which confirm rare diversification in testing evaluation methods, while not using practical tests ranked second, and not using oral tests ranked last.

Regarding the seventh question on obstacles in using modern teaching methods, the questionnaire directed to supervisors included a question of six sub-items. The supervisors set down obstacles in order of importance and according to frequencies and percentages, as clarified in Table No. (8):

Table No. (8)
Distribution of opinions of supervisors on the obstacles in using modern teaching methods by teachers

Item No.	Subject	Frequency	%
a-	Large number of students in classes	90	90
b-	Unawareness of teachers of modern teaching methods.	88	88
c-	Weak level of students	80	80
d-	Shortage in modern audio - visual aids	75	75
e-	Insufficient knowledge of teachers in producing teaching materials.	35	35
f-	Little focus of supervisors on teachers' interest in teaching aids	25	25

The above table indicates that most important obstacles are items a,d,b,c and the least important are e and f.

Regarding the eighth question on obstacles in diversification of evaluation methods by teachers, the questionnaire included a question of five sub-items , in order of importance and according to frequencies and percentages, as clarified in Table No. (9) :

Table No. (9)
Distribution of opinions of supervisors on obstacles in diversification of evaluation methods by teachers

Item No.	Subject	Frequency	%
c-	Weakness in scientific research skills	90	90%
e-	Unawareness of modern trends in the philosophy and objectives of evaluation .	78	78%
d-	Little knowledge of evaluation methods & its importance .	65	65%
a-	Burden of tasks	73	73%
b-	Insufficient time	40	40%

The above table indicates that the most important obstacle is item c, while the least important is item b.

RECOMMENDATIONS

In the light of the study results the researcher recommends the following :

- Encouraging teachers to use modern teaching methods which develop basic cognitive skills in students, especially critical thinking, programmed learning & problem - solving through holding training courses.

- Having teachers focus on higher cognitive abilities, acquiring scientific thinking skills, and avoiding memorization of facts, knowledge and information.

- Affirming the comprehensiveness and diversification of evaluation methods through using testing evaluation methods through using testing evaluation methods such as written exams (essay and objective), oral exams and practical exams, and through using non- testing evaluation methods such as projects, research writing , working papers, reports and others.

- Holding specialized training courses for the teachers in the directorates of education in Jordan. The courses could be on measurement and evaluation.

- Training teachers for conducting educational studies, and being evaluated by specialists in this field, and publishing the best ones in Risalat Al-Mualim.

Questionnaire (Annex I)

(1) Do teachers use modern teaching methods ?

Yes ( )
No ( )

If (No) is it because :

a- They focus only on explaining and dictating ( )
b- They don't take into consideration individual differences ( )
c- They don't encourage critical thinking ( )
d- They don't diversify in teaching methods ( )
e- They don't use modern audio - visual aids ( )
f- Other opinions ( )

(2) Do memorizing you think that most exam questions focus on facts, knowledge , and information only ?

Yes ( )
No ( )

If (yes) is it because they ignore :

a- The skills the student learnt ( )
b- The interests of the student ( )
c- Trends and values ( )
d- Various methods of thinking ( )
e- Higher levels of knowledge development ( )

(3) Do you think that the exams encourage scientific thinking and focus on discovering students' abilities and talents ?

Yes ( )
No ( )

If (No) is it because :

a- Most exam questions depend on rote learning only ( )
b- Exam questions rarely focus on scientific thinking. ( )
c- Exam questions rarely test various cognitive abilities ( )
d- The teacher restricts himself to the textbook ( )
e- Other opinion ( )

(4) Do teachers diversify in evaluation methods during the teaching / learning process ?

yes ( )
No ( )

If (No) is it because of :

a- Neglecting evaluation methods, other than testing, such as student records. ( )
b- Rare diversification in evaluation tests ( )

(5) If you agree that teachers neglect evaluation methods, other than testing , is it because they don't care about :

a- Writing reports ( )
b- Writing researches ( )
c- Writing working papers ( )
d- Personal records ( )
e- Student card ( )
f- Other reasons ( )

(6) If you agree that teachers rarely diversify in evaluation methods is it because :
a- They focus on written tests ( )
b- They don't use oral tests ( )
c- They don't use practical tests ( )
d- Other reasons

(7) Problems hindering teachers from using modern teaching methods:
a- Large number of students in class ( )
b- Weakness of students ( )
c- Shortage of modern audio - visual aids ( )
d- Teachers' unawareness of modern teaching methods. ( )
e- Other problems

(8) Problems hindering teachers from diversifying in evaluation methods :
a- The burden of tasks ( )
b- Inadequate time ( )
c- Weakness in skills for scientific research ( )
d- Inadequate knowledge of evaluation methods and their importance. ( )
e- Unwareness of modern trends in the philosophy and objectives of evaluation ( )
f- Other problems

References

Al-Khatib, Hussam, "Developing Arabic Language Teaching" Ninth Conference of the Union of Arab Teachers, Al-Khartoum, 1976.

Al-Khatib, Mahmoud Jamil, "Classifying the Biology Questions of the General Secondary Education Certificate Examination, During , 1970 - 1980 and comparing them with the Textbook and Teachers' Questions in Jordan", Unpublished M.A. Thesis presented to the Faculty of Education and Yarmouk University, Jordan, 1985.

Al-Zoubi, Talal Abdullah, "The Impact of Using the lab to Develop Scientific Thinking in Secondary Students in Jordan", Unpublished M.A. Thesis presented to the Faculty of Education, The University of Jordan, 1985.

Al-Qudah, Qassem Suleiman Al-Hussein, A comparative study on the General Secondary Education Examination Systems in England Kuwait , and How it could be used in Jordan.

An Unpublished Doctorate Thesis presented to the Faculty of Education at Ain Shams University, 1991.

Al-Qudah and others, "Problems Hindering the use of classical Arabic in the Schools of the Kingdom", An Unpublished Study presented to the Directorate of Educational Studies and Research, 1995.

Al-Qudah and Others, "Weakness of the Third Basic class students",An-Unpublished Study presented to the Directorate of Educational studies and Research, Amman, The General Directorate of Educational Research and Studies, 1995.

The Hashemite Kingdom of Jordan, Ministry of Education, Act of Education No. 3 for the year 1994 , Amman, 1994.

Jaradat, Izzat and Others, Introduction to Education, 2nd ed, Amman, Modern Educational Library, 1984.

Hussein, Taha, "Pre-Islamic Literature", Cairo, Dar El-Ma'aref, 1933.

Khatir, Mahmoud Rushdi, Methods of Teaching Arabic and Islamic Education in the Light of Modern Educational Trends, 4th ed.,

Ulaimat, Moh'd Muqbel, The Education System in Jordan in the Light of Modern Education Systems, Irbid, Al-Kittani Library, 1988.

Mahmoud, Salah El-Din Arafeh, "Developing the Social Science Subjects of the Sixth Elementary Class", An Unpublished M.A. Thesis presented to the Faculty of Education at Ain Shams University, Cairo, 1982.

Mutawei, Kamal Moh'd Fodeh, "School Examinations in General Secondary Education and How they Hinder the Achievement of Educational Objectives, An Analytical Evaluative Study", An Unpublished M.A. Thesis, presented to the Faculty Education at Ain Shams University, Cairo, 1985.

Morton. F., "The Development and use of a system to analyze geometry teachers, Questions", unpublished, Ed. D., Columbia University, (Michigan, Xerox University Microfilms, Vol. 32, 1972).

Thamos, Black R, "An analysis of levels of thinking in Nigerian Science teachers, Examinations", Journal of research in science teaching, vol. 17, No. 4, 1980.

EFFECTIVENESS OF A CRITICAL THINKING COURSE ON THE IMPROVEMENT OF PROSPECTIVE TEACHER THINKING SKILLS

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Educators share a common interest in promoting students' higher order thinking skills (critical thinking, problem solving), and conceptual understanding . This interest is a result of drastic changes in our world and explosion of information. The educators concern is also due to the fact that the failure to cultivate aspects of higher order thinking skills might be the source of major learning difficulties, even in elementary school (Resnick, 1987). Accordingly, serious attention was given to teach thinking in order to acquire thinking skills which, when acquired, remained constant in utility for processing whatever information (Beyer, 1987).

The movement of teaching children thinking skills stems from the belief that thinking can be learnt and taught (Fisher, 1990) Evolution of thinking skills movement occurred in three phases: thinking skills, critical /creative thinking, thoughtful classroom/ mindful school. Therefore, the levels of teaching teachers to teach thinking may parallel those very phases, namely: skill acquisition, making meaning, and transfer and application (Fogarti & Mc Tigh, 1993).

level 1: Skill Acquisition.

To teach thinking,, teachers must have a', awareness of' end competence with the specific skills of thinking. Therefore, they can be introduced to cognitive instruction by identifying,, defiling, and learning explicit thinking skills The emphasis in this stand-alone approach (Prawat, 1991; Ennis 1989) is on active processing of information through decontextualized thinking skill activities Therefore, teachers are aware of thinking as an entity in itself.

Level 2: Making Meaning.

Once teachers acquire thinking skills, they can move directly into thinking by learning how to provide opportunities to practice the skills (Bellanca & Fogarty, 1991). The focus here is on active processing of information through reasoning within subject matter areas. Teaching, is achieved either by, using "infusion approach", or "immersion approach" (Bailin, 1994, Prawat, 1 991).

Level 3: Transfer and Application'

This level requires mindful abstraction for application and transfer of learning. It is rooted in metacognitive reflection, which requires self-assessment and self- adjustment. Such reflection fosters more thoughtful behavior as students recognize and take control of their own action (Fogarty & and Mc Tigh 1993).

Educators have different points of views about critical thinking, for instance, Ennis (1987) conceives it as "a reasonable, reflective thinking that is focused on deciding what

210

to believe or do". Critical thinking so defined involves 13 dispositions end 12 abilities categorized in four main components.

Whereas, Beyer's (1987) conception is" a collection of processes that are used either separately, without order or in any combination' but it is more complicated than the micro-thinking skills". He identified ten critical thinking skills.

Watson's and Glaser's conception is "a continuos effort to test facts or ideas in light of evidence instead of jumping to conclusions (1965.محمود). They divide critical thinking abilities into five dimensions.

On the light of' previous definitions of thinking conception, and by examining, others' such as: Mathew Limpan Richard Paul Harvey Seigel (Bailin, 1994), we can introduce our own conception of' critical thinking as follows: " ***mental, reflective, rational reasonable processes that consist of the following dispositions and abilities formulating questions, defining terms and identifying assumptions deduction, inference, detecting bias, and judging arguments'*** ".

Critical thinking was and still, is a rich field of study which aims at laying emphasis on developing students' critical thinking, revealing methods of its development, and factors affecting it. For instance, Trent-Wilson (1990) investigated the effect of a micro-teaching course on the acquisition of the critical thinking skills by a group of prospective teachers the results indicated that the course was not effective.

Goldberg (1991) conducted a study aiming, at investigating the effect of two critical thinking teaching courses, one using infusion approach, and the other using direct teaching on eighth grade writing and research skills Results of using Ennis - Veir Thinking Essay Test revealed that there were no significant differences between the two groups' performance on any of the competencies measured by the above mentioned test .

Whereas, Mahmoud (1965. محمود) designed a teaching course composed of fifteen lessons to develop critical thinking skills of preparatory and secondary Egyptian students using self- learning, and group discussion. Results revealed that performance of both groups of students had improved' and improvement of the secondary cycle was greater than that of the preparatory.

Studies also pointed out that teachers are not qualified to develop the critical thinking, skills of' their students (Trent- Wilson. 1990), so, it is necessary to include new methods of training for critical thinking in the training courses to enable teachers to achieve this goal (1992, النهار وآخرون). Blai (1992), on the other hand said that the all college students must finish critical thinking courses before they leave university.

Improving thinking skills of youth has taken on more significance today than ever before. On the local level, it is best understood by the 1987 National Educational Reform, in listing, amongst its' recommendations enhancing students' critical thinking, problem solving,.... all major thinking operations. And, since it is neither safe nor desirable to assume that teachers know. or have been taught, how to teach higher order thinking skills (Lewis & Smith' 1993), skillful thinking has been identified as a priority of training teachers in what Jordan's Ministry of Education called "Common sore" training plan. One of its' aims was to direct teachers to develop students' critical thinking, abilities (1991, خطة تطوير الأطر التربوية) but, unfortunately, this training was not successful (1992, النهار وآخرون). One of the reasons could be, that, it began in level 3 "transfer and application" without being certain of teachers' acquiring "thinking skills" (level 1) and "making meaning" (level 2). Therefore, this study was designed to investigate the effect of a new training course, that was developed by the two researchers, on the critical thinking skills of prospective teachers at the Hashemite university in Jordan to enable them to think critically in order to transfer this thinking skill to their students.

The aim of this study parallels universal and local trends that emphasize on developing, critical thinking ability as a factor that help students master subject matter thinking independently, and willing to behave wisely and reasonably (Norris 1985; Paul.1 984).

Purpose:

The purpose of this study was to detect the effectiveness of a critical thinking training course on improving the prospective teachers' thinking skills. and to reveal what changes this program has on each dimension of critical thinking skills. This study also, investigated the effect of the students' achievement level as measured by their GPA in the first semester (high, medium, and low), and their university majors (math teacher, Arabic teacher, and class teacher), and their interaction, on their critical thinking skills that could be attributed to this program.

Method:

Sample:

The Sample of this study, consisted of thirty-nine freshman students, attending the Critical Thinking course from the Faculty of Educational Sciences at the Hashemite University, Jordan' 2nd semester of the year 1995/1996 The pre-program critical thinking skills were initially assessed using Watson - Glaser Appraisal Form that was adapted for Jordanian culture. Evidence of its' concurrent validity was obtained from its' substantially high correlation with Basic, Mental Abilities test which equals 0.77, and an indication of its' estimated reliability was obtained using test related method and it 0.94 (1994,الكيـلانـــي) The previous Appraisal Form constitutes the following, dimensions: inference' identifying, assumptions' deduction, explanation, and verifying, arguments.

Development of critical thinking course:

Six major dimensions were extracted, after thorough examination of lists of critical thinking skills prepared by Ennis. 1987, Costa, 1985; Beyer, 1987; and Watson-Glaser, 1991 No duplication of their work was intended here, rather, we have tried to draw out the commonalties in order to identify the dimensions and translate them into meaningful activities that can be used to stimulate students' critical thinking skills. Accordingly, we have identified the following dimensions:

- Formulating questions .
- Defining terms & identifying: assumptions .
- Deduction.
- Inference.
- Detecting bias.
- Evaluating arguments .

These dimensions don't form a taxonomy; they are neither discrete nor comparable categories, they relate to each other in different ways. Therefore, they don't form hierarchy, they were chosen because they reflect the various aspects of critical thinking from our point of view.

The first dimension," formulating questions'. involves invitations to think or do through asking questions. Good questions focus attention. attention, force comparison, seek; clarification, invite inquiry, and seek reasons.

We consider the second dimension, "defining terms & identifying assumptions", to include identifying, attributes and components. and articulating the parts that together constitute a whole, identifying un-questioned givens that, to us, have the status of self-evident truths . Moreover, this dimension includes also clarifying the concept, judging definitions, and identifying stated or un-stated assumptions.

The third dimension, "deduction ', refers to the ability to extend an existing principle or idea in a logical manner.

"Inference", the fourth dimension, is conceived as going beyond available information to identify what reasonably may be true.

The fifth dimension, "detecting bias", refers to the ability of finding out whether the opinions & argumentation of a person are products of his / her personal thoughts and experience, and if he/she used glittering terms or emotional expressions to describe objects or events. "Evaluating arguments", the sixth dimension involves assessing reasonableness and quality of ideas, establishing criteria for judging the value or logic of ideas, using specific standards or criteria for evaluation. Furthermore, it includes judging the credibility of a source or argument, determining its strengths or weaknesses according to certain acceptable criteria detecting logical fallacies, distinguishing between relevant and irrelevant information. and between verifiable facts and value Judgments .

Although there are three levels of fostering higher order thinking; through education, and because our students lack acquisition of these skills. the stand-alone approach "skill acquisition" was adopted and used in this study Accordingly, twenty seven activities were prepared to address the six dimensions as follows:

Number	Dimension	No.of activities
1	formulating questions	6
2	defining terms & identifying assumptions	4
3	deduction	5
4	inference	4
5	detecting bias	2
6	evaluating arguments	6

The activities were organized as a series of 20 lesson clusters, each consisting of one to two 50-minute lessons over the course of 7 weeks, and were presented in the same sequence of dimensions previously mentioned . Through out these activities, students were encouraged to develop the following, skills: clarity, precision, specificity, accuracy, relevance, logic, depth, completeness, significance, adequacy, consistency, commitment to impartiality and objectivity In order to obtain evidence on the course's content validity, eight scholars were solicited to judge the extent of:

a) coverage of the previous six dimensions to most of the major or core critical thinking skills,

b) relevance of activities to the corresponding, dimensions,

c) adequacy of activities to students' cognitive abilities

Eight 2-hour sessions were held between the researchers end each scholar, to discuss together their judgments according, to previous criteria Accordingly, the course was improved in the light of the attained feed back.

Procedures:

The sample was divided into ten 4-student groups received training, were the researchers functioned as trainers for twenty 50 - minute sessions. In these training sessions there were a combination of active group work, discussion between members of groups and with trainers. The trainers attempted to help students in the course of discussion within group and between groups by posing problems, eliciting questions, and asking for comments.

The activities were presented to students on an over- head projector, and a copy of each activity was distributed to each group. After group discussions, they were asked to present the results of their discussion to other groups, using a transparency to enable the whole class to follow up the ideas presented. and give their contribution in discussing these ideas..

Throughout the study, the two researchers met regularly to discuss the activities and analyze students' responses in order to develop the activities in the light of feedback attained by real practice. At the end of the course, the students' critical thinking skills were measured using Watson-Glaser Appraisal form once more.

Results and discussion:

The main aim of this study is to detect the effectiveness of the course improving students' critical thinking skills.

To achieve this aim, paired sampled or correlated t-test was calculated, between the means of the samples pre- and post- tests in critical thinking skills as measured by Watson-Glaser. Table (1) illustrates the correlated t-test for the dependent observation.

Table(1)
Correlated t-test between the means of pre- and post-test in critical thinking skills

post-test		**pre-test**		**t value**	**level of significance**
$\bar{X}_1$	Sd_1	$\bar{X}_2$	Sd_2		
37.051	5.261	33.410	5.26	4.42	0.000

Table (1) shows that the mean differences between pre- and post- tests in critical thinking is statistically significant at 0 05 level, which indicated that the course is effective in improving, the freshman's critical thinking skills. The finding of the study is consistent with de Bono (1987) who argues that thinking is generally a skill, could be taught and improved using the stand-alone approach. And goes in line with the findings of Mahmoud (1965, محمود). And agrees with the results of Feurenstein et al., and Weinstein & Mayer as quoted by Marazano, et al., contest that,' students' repertoires of thinking skills and strategies can be modified substantially by effective instructional methods ' (1988). Meanwhile, further research is needed to clarify the courses impact on secondary school students' and in- service teachers' thinking, skills. On the other hand, these findings are inconsistent with Trent- Wilson's (1990) results; hence' more research is suggested to seek reasons to solve this contrast.

Moreover, this study aims at revealing; what effects this course has, i.e. whether this course produces changes in each dimension of the sample's critical thinking skills or not.

To achieve this end, paired sampled or correlated t- tests were calculated, between the means of the pre- and post-test of the group in each dimension of the critical thinking skills as measured by Watson-Glaser Appraisal Form, table (2) illustrates the t-tests for the dependent observations.

Table (2)
paired Sampled t-test for the f five dimensions
of the critical the inking skills

Dimension	posttest		pretest		t value	level of significance
	$\bar{X}_1$	Sd_1	$\bar{X}_2$	Sd_2		
Inference	6.949	2.127	6.410	1.634	1.72	0.094
Identifying assumptions	8.59	1.499	7.667	1.595	3.230	0.003
Deduction	6.18	1.848	5.872	2.191	0.830	0.410
Explanation	7.05	1.776	6.359	1.224	2.540	0.015
Evaluating arguments	8.28	1.76	7.100	2.303	3.170	0.003

Table (2) shows that differences in means between pre- and post-tests for dimensions: identifying, assumptions' explanation and evaluating arguments, are statistically significant at 0.05 level, whereas, the mean differences per- and post-tests for the dimensions deduction and inference were not statistically significant at 0.05 level. despite the fact that the means of their post-tests are greater then the correspondin pre-tests.

The previous result could be attributed to the fact that these two abilities (inferenc and deduction) require thorough understanding, and in-depth analysis of the given issu and proposed consequences. The consequence of deduction needed to be judged on 5-point scale (true, probably true' missing information, probably false, and false) Whereas, the conclusion of inference is needed to be judged (whether they ar necessarily consequences of the premises or not) especially for arguments that have th terms: some, all, most, seldom, usually.... This result points out the need for furthe research to see whether is it possible to improve students' deduction and inference skill and how?

A third aim of this study is to detect whether the course is equally effective fo students with different achievement levels, university majors, and their interaction, o their thinking skills.

To achieve this aim, students were divided into three levels according to their GPA i the first semester (high, medium. and low), and their university majors (class teache Arabic teacher, and math teacher).

Two-way analysis of covariance (3x3) was calculated for the main effects of th course on the variables (achievement level, university major), and their interactio Table (3) shows the 2-way ANCOVA for the impact of the main effects and the the interaction on thinking skills as measured by Watson-Glaser Appraisal Form whic could be attributed to the course .

Table(3)
Two-factor ANCOVA corresponding to students' achievement level (high, medium, and low), and their corresponding university majors (math teachers, Arabic teacher, and class teacher)

Source of variance	SS	df	MS	F	level of significance
Main effects	256.168	5	51.234	2.841	0.035
level	37.448	2	18.724	1.038	0.368
major	40.291	2	20.145	1.117	0.342
pretest(cov)	125.806	1	125.806	6.976	0.014
Interaction	143.913	3	47.971	2.660	0.069
level x major	143.913	3	47.971	2.660	0.069
Explained	400.082	8	50.010	2.773	0.623
Residual	468.889	26	18.034		
Total	868.971	34	25.558		

Table (3) indicates that neither the interaction between students' achievement levels, as measured by their GPA, and their university major' nor their achievement levels, or their university majors have statistically significant impact on their thinking skills that could be attributed to the course, the course has nearly the same impact on students' thinking skills whether they differ in achievement levels, in university majors, or, in the interaction between them This result goes in line with the findings of Feurestein, et al., and Weirstein and Mayer as quoted by Marazano, et al., that, "effective critical thinking skills can be developed by effective instructional methods not only for high- achievers, but also. for low- achievers '(1988).

In conclusion, and as Beyer (1987) conceives critical thinking. the findings of the study indicate that this course is effective in improving, critical thinking skills a whole, and their ability in identifying assumptions, explanation, and judging arguments; though it failed to prove it statistically for the deduction and inference abilities. And since this effective course addresses level I of teaching, thinking, it is recommended to design and test another course, addressing, level 2 "making meaning,".

As a result of informal observations during the training sessions, this study provides rich information about students' thinking behaviour:

- An ingrained refusal to think about any thing for which there is no ready answer changed into a willingness to discuss issues of more than one answer, i.e. an inclination to think about something clearly appeared, even though the quality of thinking may be poor.
- Bias and prejudice were lessened, and students were able to acknowledge each others points of view, even if they don't really accept it.
- Suspect in their ability to produce reasonable ideas was replaced by greater confidence in putting forward ideas.

These observations point out the need for further research to investigate the way this course affects students thinking behaviours.

References

الكيلاني، انمار. (١٩٩٥)، التفكير الناقد لدى مديري المدارس الثانوية الحكوميّة الملتحقين ببرنامج ماجستير الإدارة التربوية في الجامعة الأردنية. دراسات ٠ (العلوم الإنسانية)، ٢٢-أ (٦)، ص ٣٥٩٩- ٣٦٢٣.

محمود، إبراهيم وجيه، (١٩٦٥)، تحسين التفكير الناقد، طرابلس، وزارة الإعلام والثقافة

النهار، تيسير، وأحمد بطاح؛ وغالب فريحات، (١٩٩٢)، دراسة تقويمية لبرنامج تدريب المعلمين أثناء الخدمة، المركز الوطني للبحث والتطوير التربوي، ص ص ٢٠-٢١.

وزارة التربية والتعليم (١٩٩٠). خطة تدريب الأطر التربوية الأردنية في أثناء الخدمة.

Bailin, S.(1994). Critical Thinking: Philosophical Issues. In Husen, T. & Postlethwaite, T (Eds.) ***The International Encyclopedia of Education***. (2nd ed.) Vol. 2. Pergamon.

Bellanca, j. & Fogarty, R.(1991). ***Blueprints for Thinking in the Cooperative Classroom***.(2nd ed.). Vol. Palatine, IL: Skylight Publishing.

Beyer, Barry k.,(1 987), Practical Strategies for The Teaching of Thinking, Boston: Allyn and Bacon, Inc.

Blai, Boris Jr., (1992), Assessment of Critical Thinking in Post secondary Education, A Dialog Search From ***ERIC Database.***

De Bono,E.(1986).***CoRT Thinking***. Pergamon Press, New York.

Ennis, Robert H.' (1987), A Taxonomy of Critical Thinking Dispositions and Abilities, In Baron, J Boykoff & Sternberg, Robert J.,(Eds.), ***Teaching Thinking, Skills***: Theory and Practice, New York: w. h. Freeman and Company.

Ennis, Robert. H.,(1989), Critical Thinking and Subject Specificity: Clarification and Needed Research, ***Educational researcher*** 18 (3), pp. 4-10.

Ennis, R.(1987) A Taxonomy of Critical Thinking Dispositions and Abilities. In J.B' Baron &R. Sternberg (eds.) ***Tenching Thinking Skills: Theory and Practice***. pp-26 New York: W.H. Freman & co.

Fisher, R. (1990), ***Teaching Children to Think,*** Oxford Basil Blackwell Ltd.

Fogarty, R.& Mc Tigh J.(1993). Educating Teachers for Higher Order Thinking: The Three Story Intellect, ***Theory Into Practice*** 32 (3), pp. 161-167.

Goldberg, M. Lou' (1991), A Study of Critical Thinking Competencies in Above-Average Eighth-Grade Students Unpublished Dissertation, Temple University, ***Dissertation Abstracts International*** 52 (1991).

Lewis. A. & Smith, D. (1993). Defining Higher Order Thinking Skills. ***Theory Into Practice***. 32(3) I 3 1- I 37

Marazano,R., et al. (1988). ***Dimensions of Thinking***,: A Framework for Curriculum and instruction. ASCD. Alexandria.

Norris, Stephen. P, (1985) Syntheses of' Research on Critical Thinking, ***Educational leadership*** 42(8) pp. 45

Paul, Richard w., (1984), Critical Thinking: Fundamental to Education for a Free Society, ***Educational Leadership*** 42 (1), pp. 4-14.

Prawat, R.(1990). ***The Value of Ideas: The Immersion Approach to the Development of Thinking*** Unpublished manuscript, Michigan State University.

Resnik, 1,.(1987). ***Education and Learning to Think*** Washington' DC National Academy Press.

Trent-Wilson, V.(1990), Effect of A Micro -Teaching Course on Critical Thinking skills of Prospective Teachers, Un-published dissertation, ***Dissertation Abstracts International, 51(9).***

Watson ,E. & Glaser, M. (1991) ***Critical Thinking appraisal Form. Y.M.***, Harcourt Brace Jovanovich Publishers

Winocur, S.(1985) Developing Lesson Plans With Cognitive Objectives. In Costa, A.(Ed) ***Developing Minds: ,4 resource Book far teaching Thinking***. Alexandria, Va: Association for Supervision and Curriculum Development.

level 1 : Skill Acquisition.

To teach thinking teachers must have an awareness of and competence with the specific skills of thinking. Therefore, they can be introduced to cognitive instruction by identifying, defining, and learning explicit thinking skills. The emphasis in this stand-alone approach (Prawat 1991; Ennis. 1989) is on active processing of information through decontextualized thinking skill activities. Therefore? teachers are aware of thinking as an entity in itself.

EDUCATING RACIAL MINORITY GROUPS FOR FULL PARTICIPATION IN THE SOCIAL SYSTEMS OF THE DOMINANT SOCIETY: NEGOTIATING CULTURAL REALITIES IN THE CONTEXT OF EDUCATION REFORM.

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INTRODUCTION

The life contexts of the Canadian native Indians and the Roms in the Czech Republic seem on the surface to be so similar, that anyone engaged in a comparative analysis must consciously guard against oversimplification of the issues. Indeed, there are some significant analogies such as distinctive racial characteristics, survival for many generations as a group that is ethnically distinct from the dominant society, maintenance of distinct cultural and spiritual traditions which originally included a nomadic lifestyle and a close connectedness to nature, and maintenance of distinct language(s) and art forms. In both cases the dominant societies are undergoing education reforms which acknowledge individual rights and differences. On the other hand, there are many significant differences between these two peoples, such as their approaches to self identity, to their relationship with the citizens and the governments of the dominant societies, their approaches to education, and their definition of empowerment.

Title of the paper

Soon after we committed ourselves to the title of this paper for the conference, we realized that the sentiment therein was too ambitious and reflected the optimism of the dominant society's reality tunnel (Wilson, 1994). "Educating racial minority groups for full democratic participation in the social systems of the dominant society', we have learned, is a typical well meaning national level education policy, which must be understood as a broad directive with a wide scope for interpretation at the implementation end, if it is to be successful. We were reminded repeatedly of the obvious fact that ethnic groups are not monolithic entities and of the evolving nature of culture. Clearly, issues at the community level are much more complex than they seem at the state level. While there are individuals within both groups, the Roms and the Indians, who are actively engaged in public life and the promotion of their people's issues in the political arena, there is also the "silent majority" of people who use their energies and thoughts to carve out their own individual paths and survive in the "no man's land" between two cultures. For this reason we have appended the title to reflect the cultural process.

Organization of the paper

This paper is an overview intended to contextualize the two cases, including background, current issues and approaches to the provision of specialized education programs for these minorities. Being mindful of the diversity within each ethnic group, the overview proceeds from the national level to the community level. In the next two sections, each ethnic case will be described in terms of their social, economic and political contexts, government policies and programs relevant to education, as well as the attitudes of the ethnic group toward education and their reaction to government programs. In the final section of the paper, common issues will be identified and approaches to these issues will be analyzed.

Methodology

This paper constitutes an initial examination and overview of issues pertaining to the role of education in enabling two ethnic minorities, the Roms in the Czech Republic and the Tsuu T'ina Indians in Alberta, Canada, to participate fully in the social systems of the dominant societies.

As such, this paper will necessarily be followed up by in-depth field work which will be documented in subsequent reports. The issues identified below will form the basis for collaborative activities carried out by the researchers and the ethnic communities. The preparatory work for these activities is already underway.

Conceptual Framework

The approach taken in this paper was to do a systematic overview of both groups in terms of history leading to their present political, economic, social, and cultural position in society. This was followed by exploring the current educational context of these groups, from state-level policy to school-level implementation. These issues were examined also with view of testing the relevancy of Spindlers' (1993) conception of culture as a process. Lessons learned in each of these cases, including concrete examples of both successes and failures were examined. Data sources included policy documents, government statistics, as well as interviews. Issues thus collected were then used to search for a suitable conceptual framework or at least a metaphor that would be useful in organizing subsequent research questions.

THE CASE OF THE ROMS

Background

The Roms as they prefer to be called, have migrated to Europe from India in several migratory waves, making significant stops along the way in the middle east, Persia, Egypt, Greece, and north Africa on the way to Spain (Davidova, 1995, p. 14). The stable core "general Rom" language contains components of Indian, Iranian, Armenian, and Greek languages. This core was augmented with words borrowed from the languages of their "host" countries (Sebkova, 1995, p.11). On their travels the Roms acquired names such as Athinganoi, Cikani, Cygan, Zingari, Egypcianos, Gitanos, Gypsies, and others from the host populations.

According to the exhaustive and meticulous study of Davidova (1995), Roms have lived in "the Czech lands" for approximately the past 6 centuries (the first verifiable reference being from the lords of Rosenberg executioners' records of 1399, the next from 1416). Although they had a nomadic lifestyle and consequently always lived outside of the mainstream society, they returned regularly, for example to the same summer habitats.

Their existence in Europe had been generally characterized by negativity and persecution, beginning with their excommunication in 1427 by the Archbishop of Paris The emperor Ferdinand I. had made the persecution of Roms lawful even before the resolution of 1548 in Augsburg, which declared that a murder of a Gypsy is not punishable by the law. A different approach to Rom relations was adopted by the Empress Maria Theresia and her son Josef II (1740-1790) who chose forced assimilation as a solution to the Rom problem. This included outlawing the nomadic way of life and the use of the Rom language, as well as forced re-education of Rom children in non-Rom foster homes. The result of this effort has been the settlement of a group of Rom families in southern Moravia, who have remained there to this day.

The laws of the first Czech republic (1918-1938) continued the efforts to limit the nomadic way of life. In keeping with the recapturing approach, the first Rom school was established.

None of the previous actions of the dominant society, however, equaled the devastating impact of Nazi racial cleansing programs during the second world war. Mass deportations of Roms to concentration camps, particularly the Rom camp at Auchschwitz II Brezinka, where half a million European Roms died, decimated the Czech, Moravian, and German Rom populations. The few Czech and Moravian Roms that returned from the concentration camps at the end of the war ceased speaking the Rom language. Most of the Roms that now live in the Czech Republic come from Slovakia (Lipa, 1965, p.4) where they previously led a semi-nomadic life, returning annually to their colonies of thatched roof huts.

After the war, the communist government of Czechoslovakia continued the pre-war efforts to stop the nomadic way of life of the Roms: *the state solution to the so-called gipsy question during the totalitarian regime between the years 1950-1988 when the socio-political regime tried to assimilate the Romanies, to "cultivate" and integrate them; it did not respect the specific nature of Romany ethnicity and this entire "solution" (if grandiosely conceived, directed and subsidised by the state) was, from the point of view of the Romanies, a solution which was "about us without us"an unjust solution.*
Davidova (1995, p. 239)

In spite of the obvious differences in traditions and lifestyle, Roms were settled into government housing, initially in existing buildings including valuable historical sites which sustained severe damage as a result, and later in newly built apartment block complexes. Children were required to go to school, although the majority were very quickly channelled into "special schools" for children with learning and behaviour disorders. Ironically, under this surface appearance of compliance, the majority of Roms were able to continue some of their traditional ways of life. A census of the Rom population conducted in August 1947 in Czech lands and Moravia identified 214 Roms as Incorrigible antisocial"; in Slovakia the number identified was 2,884 .

The state had provided a comprehensive social safety net for all its citizens, including the Roms. This patriarchal approach did not require the Roms nor the Czechs) to evolve their own initiative in order to better their lives.

Within the official framework of addressing the "Rom question" efforts continued to be exerted by academics to analyze and understand the Rom languages. A number of Rom language textbooks and grammar analyses were done by Lipa (1960, 1963, 1965), Davidova (1959) Bacikova (1959) and others. The intent was to make it easier for teachers to communicate with Rom students, rather than to create a Rom-focused curriculum. The aim was still to " remove all remnants of isolation of the Rom population and its results" (Bacikova, 1959), or, as Balabanova put it with post-communist frankness " to paint Rom children white" (1995, p.5). Roms themselves did not express any desires that the non-Rom population should communicate with them in the Rom language, opting instead for preserving their language as a "secret language" not understood by the "gadie" et' dominant society (Lipa, 1965, p.11)

Learning to build a democratic society in the post-communist era: from state-level policy to school-level implementation

The "velvet revolution" (November 1989) brought about dramatic changes in the social and economic structure of the Czech Republic at an unprecedented speed According to the studies of Mateju and Rehakova (1992), while under the old system, education and personal initiative were not considered to be strategies for success, overnight they became tickets for social and economic success in the new market economy: *To the extent that changing economic and social conditions upgrade education's economic value, beliefs will also change about schooling as an instrument for raising one's prestige, self-esteem, and life prospects. Mateju and Rehakova,* (1995,p.164)

Given this situation, it is clear that the Roms, a majority of whom do not finish elementary school, are becoming very vulnerable in the newly competitive job market at a time when the government is beginning to dismantle the massive social safety net of the communists. According to an official at the Ministry of Education whose responsibilities include Rom education, the Roms are losing in the competition over manual labour jobs to white migrant workers from the former Soviet Union and the Balkans. As a result, many more groups of Roms are turning to what he terms the "alternative industries" including stealing and drug trafficking. He noted that heroin addiction among Rom children is becoming a serious impediment to the provision of education in some Olah Romany communities. This view has been confirmed by L. Sztojka, spokesman for the Olah community, who noted that the children are not only drawn into the drug distribution network but have themselves become heavy users of the drugs.

One of the first areas of focus for the post-communist government was a fundamental reform of the education system, including a new approach to the handicapped and ethnic minorities. A 1991 national census in the newly formed Czech Republic was disappointing in terms of providing the anticipated information about the educational status of the Rom population, since only about 30,000 Roms identified themselves as Roms. By extrapolation from previous census figures the number should have been between 150,000 250,000. The information provided therefore gives an impressionistic sketch at best, nevertheless the image that emerges is neither encouraging nor surprising: 78\ reported having some to complete elementary education; 10.9% had some secondary education, primarily vocational training; 0.3% had university education; while 5.5% reported having had no education at all.

While the communist government's practice of sending Rom children to Special schools continues to be the subject of lively debate with political as well as pedagogic overtones, the Ministry of Education has chosen to focus their attention on the training of future teachers who would be working with Rom children. In 1992, a Fund for the Development of University Education was established "to encourage new pedagogic approaches" particularly for education of the handicapped and ethnic minorities, primarily Roms. As such, suggested themes included the study of Rom language and Romistics', education for tolerance, awareness of ethnophobia and racism, and special pedagogic approaches to help secondary school students complete school and enter university. The Fund, now in its fourth year, supports projects from university faculties of education; currently 5 of the 8 faculties are participating.

One form of "free expression" in the newly democratic Czech Republic is the growing neo-nazi "skinhead" movement, which uses violent attacks on members of ethnic minorities to express their extreme xenophobia views of protecting the "pure" white race. While there have been several attacks on black people, the primary target of the "skinheads" are the Roms. In response to the increasing incidence of violence, the Ministry of Education issued a "'Directive to schools regarding action against expressions of racism, intolerance, and xenophobia a" (August 18, 1995). This Directive orders schools to prepare students for peaceful coexistence with an increasing number of people from different national, ethnic and religious groups. The Directive makes suggestions for specific activities in particular subjects of the curriculum. The implementation of the Directive was followed up a year later with an evaluation. The evaluation report defined the responsibility of the education system as: *...to moderate and form values and orientation of students in conditions where societal consensus in this direction is more a goal than self-evident reality and where a number of necessary regulatory and support mechanisms are only beginning to be created.*
Czech Inspectorate report, 1996, p. 1

The evaluation revealed that there were significant numbers of incidents of racial intolerance and aggression observed, with Roms being the victims in about half the cases and aggressors in the remaining cases. Intolerance was also observed against students with handicaps and students of different religious orientations. Intolerance between different casts within the Rom communities has also been reported. School principals cited lack of suitable curricular and support materials, as well as lack of cooperation from Rom parents as serious obstacles in promoting racial tolerance.

The difficulties in communicating with Rom parents are to some extent explained by school personnel as stemming from the fact that some Rom parents have no experience with schooling at all, and as such are unable see education as having any value for their children. While the Ministry of Education provides basic education (elementary and secondary) as well as remedial education for adults free of charge (27.10.1995), Rom adults have not been taking advantage of this option in great numbers.

Civic Democracy as a Basis for Educating Ethnic Minorities: lessons learned

According to the Secretary of the Office of the Nationalities Council of the Czech Republic government, educational and cultural programs and projects of ethnic minorities are supported according to the principles of civic, rather than national democracy, which in practice means that individuals or local community groups are the units of negotiation with government. In this ease, project proposals are submitted either to the Ministry of Education or to the Nationalities Council directly, for funding. The Nationalities Council provides help with proposal writing and budgeting. Aside from the Roms, the program serves Polish and German ethnic groups, both of whom run sophisticated projects.

According to the Secretary, the Nationalities Council endeavours to be as forthcoming as possible to the Rom community without actually singling them out as a special ethnic group, which would not only be counter to the principles of civic democracy, but might actually attract undesirable attention of the fringe racist groups. This view was echoed by an official of the Ministry of Education who described the government's position as: "we leave the door open, we paint arrows on the sidewalk to the door, but they must enter on their own."

The Ministry of Education records of the Rom community groups receiving grants, the types of activities, and the amounts of grant- money, indicate that grants were requested by small groups, usually for recreational activities for Rom children. The largest grant amount was the equivalent of about $19,300 US., with many of the grants being much smaller. The report indicates that the main problem is that the groups do not provide any financial accounting of the money spent, which is a prerequisite for receiving subsequent grants. The report also states that the Department of the Ministry concerned with Physical Education has grants available for public programs of organizations that are national in scope and have a minimum of 2,000 members. Because the Rom groups are not integrated in any way, they are not eligible for these grants.

The Secretariat of the Office of the Nationalities Council calls periodic meetings with the Minister and Deputy Minister of Education, the Minister who chairs the Commission, civil servants responsible for relevant areas within the Ministry, and representatives of Rom communities throughout the Republic. The most pressing issues reported by the Rom representatives at the last meeting (April 1996) were: education of Rom children, adequate social pre-school preparation of Rom children, communication between school and Rom parents, lack of multiethnic education in school, lack of role models from other cultures, lack of systematic coherent program for Rom education within the school system, need for a first grade Rom reader, and need for systematic anti-drug education and help for addicted children.

Two new programs were seen as successful: a pilot study for a lifelong learning program involving life skills education of Rom women (aged 15-60), (Rauchova, 1993), and the head-start type of program for Rom children called 0-grade classes. While these types of programs do show immediate and observable benefits for the individuals involved, they are the focus of heated debates about the benefits and drawbacks of segregating Rom students. The anti- view was strongly represented at the meeting by Antonin Petras who emphasized that segregation of Rom children should not be allowed even in pre-school programs, and that common educational experiences should commence at the age of four. Michal Pulo, on the other hand, cited numerous examples of schools where Rom parents specifically request that their children be transferred to the Special School, so that they could be with their Rom friends. He also pointed to specific examples of schools where Rom students are concentrated in one particular class within each grade.

The lessons learned over the past 50 years include the recognition that while various past efforts at assimilation of Roms resulted primarily in the destruction of external supports such as living in colonies, periodic migration between camps, and the practice of traditional tribal laws and customs, they have not been able to change the Rom racial characteristics and way of viewing the world

As a result, Roms now live dispersed within the Czech population while there are areas with a greater concentration of Roms, this is primarily because of economic reasons, or because the previous regime provided them with subsidized housing in a particular area rather than as a specific decision to form a community. A number of Rom families may live in an apartment complex but they may not know each other. There is indeed a noticeable lack of large scale political organization, such as The Assembly of First Nations in Canada

The economic situation of the Roms is deteriorating in the present system, since they have traditionally depended on menial manual labour jobs which required no formal education. The Roms must now compete for these jobs with migrant workers from the Ukraine and other post-Soviet countries. At the same time, the general level of education and training required for employment also contributes to the rising unemployment of Roms.

The levels of education among the Roms are very low, with few individuals finishing high school. The number of Rom students in special schools is still disproportionately high. The situation is further complicated by a seeming general lack of interest in school on the part of Rom parents In general, Roms tend not to see education as a vehicle to any type of success, as was pointed out with characteristic frankness by a number of Rom representatives at the meeting with the education minister. As the Secretary for the Office of the Nationalities explained,some of these attitudes are related to the Roms' sense of time. Unlike the Czechs, they do not have a future orientation, but are instead firmly focused on the present and the immediately tangible present-day rewards of their labours. An investment of effort in education does not bring the immediate results which would validate it. The same time sense is cited as a factor in the decision on the part of Roms not to buy subscriptions for Rom and Rom-Czech magazines that are available. Any attempts activating and combining community and school at interests should therefore be small-scale personalized, experiential and focused on building mutual trust between the school, community and parents. Every day, the child should be doing something in school that would give the parent a practical reason to send him again the next morning. The 0-grade classes appear to be one environment which has a potential for fulfilling these conditions. Not only do they focus on the specific needs of Rom students, they also increase the possibilities of making contact with the parents and eventually building a small Rom community around the school. There is one example where this approach is in fact working - a newly opened private elementary school for Rom students. If this school continues to be successful, it may have important lessons as well as precedents for other schools interested in the concept of community building.

THE TSUU T' INA INDIANS OF ALBERTA

Background

The Tsuu T'ina are Athapaskan-language speakers who originated in northern Alberta and the northwest Territories. By the end of the 18th century, the Tsuu T,ina had moved into the northern plains and had adopted a Plains Indian lifestyle. Throughout the 19th century, they engaged in warfare with surrounding groups and soon became allied with the Blackfoot-speakers of the southern plains. This alliance was so close that the anthropologist Diamond Jenness commented in 1921 that in virtually all but language the Tsuu T'ina could be considered Blackfoot (Jenness, 1938:8). In 1877, the Tsuu T'ina signed Treaty 7 with the federal government, which ceded all rights to lands held previously, in exchange for a small reserve on the outskirts of Calgary, Alberta. Provisions for Tsuu T,ina education were guaranteed in Treaty 7 which contained a clause promising the establishing and maintenance of schools on reserves. In 1885, the first school was built on the Tsuu Tina Reserve by the Church Missionary Society of London and in 1895, a residential school was established by the same organization. During the early reservation period' diseases particularly tuberculosis were so prevalent among the Tout Tina that a doctor a that a doctor was appointed Indian

Agent in 1921. By 1921, the Tsuu Tina population had fallen to an all time low of 125 individuals from an estimated 477 at the signing of Treaty 7. In 1921, the residential school was turned into a sanatorium and hospital. A new day school built on the south side of the hospital operated between 1921 and 1948. In 1949 a new two-room school house was built further west on the reserve. The Anglican Church remained in control of schools on the reserve until 1969 when the Federal government took over direct control of Indian schooling. In 1971, the reserve school was torn down and Tsuu Tina students were bussed into the city of Calgary for the first time. After 1921, the Tsuu Tina population rose steadily to 143 in 1931 and eventually to its present level of just over one thousand. Throughout this period, certain TSuu Tina cultural traditions and the Tsuu T'ina language declined. With fewer than a dozen native speakers by the early 1970s, linguists deemed it to be a moribund language (Helm, 1981:84-85).

The Development of Educational Alternatives: From State-Level Policy to School-level Implementation

In 1992, an elementary school for Kindergarten and Grades One to Five was opened under band-control on the Tsuu T'ina Reserve, A combined junior and senior high school was opened in 1994. These developments marked the end of over a hundred years of direct educational control by the Federal Government and ushered in the era of self-governance for the Tsuu T'ina.

Throughout that period of time, five generations of Tsuu T'ina were influenced by the same evolving government philosophy as were all the other tribes in Canada. During this time also, federal government educational policy evolved through various stages of development in response to a changing educational philosophy and principles of practice. Indian education until 1950 was influenced by two basic educational philosophies. The first was the general one of *providing a basic education for all children in Canada.* The second was a paternalistic one originating in the pre-Confederation period which stressed the *necessity of assimilating all Indian children to the precepts and Practices of the dominant society* (Barman et al, 1988:6). The segregationist policy announced in 1910 of *"fitting the Indian for civilized life in his own environment,"* ensured that the formal education of Indian children would remain minimal at the same time that education for non-native children was becoming more extensive (Barman et al, 1988:9).

With the revised Indian Act of 1951, a new policy of integration was adopted and *agreement* were negotiated between the Department of Indian Affairs and provincial departments of education and local school boards. A philosophy of educational integration followed the Joint Committee of the Senate and House of Commons Report To Investigate the Indian Act of 1948. After 1950, there was an increasing emphasis on off-reserve schooling and in 1957, band councils were empowered to elect school committees. By 1960, almost a quarter of the 38,000 Indians attending schools were in provincially-controlled institutions. Following the publication of the two volume Hawthorn Report in 1966 which condemned the poor quality of native education in Canada, new initiatives were undertaken in the areas of education self-governance and cultural programming.

The new philosophy of Indian education emphasized the individual child and the development of native curricular resources, community advisory groups and native teaching training. The Hawthorn Report noted that for the 35 bands surveyed, a 94% dropout rate was recorded for native students between grades 1 and 12 for the years 1952-1962. This compares with a 12% dropout rate for non-native students for the same period. The dropout rate between 1971 an 1981 remained constant at roughly 78% compared with 25% for non-natives. Other sources of demographic information describe the Grade 12 completion rate rising slowly over the past twenty years to an estimated 45% in 1989 (Armstrong et al, 1990:8).

The Hawthorn Report, which included an investigation of the Tsuu T'ina Reserve, recommended the complete integration of native students into mainstream society and a move away from the 'basic education' approach so that native students could participate

227

fully as citizens in Canadian society (Dept. of Citizenship and Immigration, 1969:4-5). By the 1970s, the Indian Department took the initiative to establish native community advisory boards to schools but these bodies had limited influence (Yuzdepski, 1983:40, 1-2): in 1989, 45% of Indians were still classified as functionally illiterate and 37% of status Indians had less than a grade nine education, compared with 17% for the rest of the Canadian population.

According to recent government estimates the proportion of Indian students who remain in school until grade 12 increased from just over 3 percent in 1960/61 to 73% in 1994/95 (INAC 1992:45). Such figures may suggest a correlation with increasing Indian control of education, however, temptation to ascribe this rather tenuously-based figure to the developing self-governance is curbed by the realities of Indian school enrolment. Thus, in 1994-1995, the following breakdown of Indian school enrolment was observed: Federal and Private schools each had 2% of the Indian enrolment while provincial schools still retained 41% and band-operated schools had 54%

A sober assessment of the progression of the federal government's education philosophy does, nevertheless, show an increasing influence of growing Indian political activism. The move towards native self-governance in education truly commenced with the politicization of native groups in Canada and with the policy statement, *Native Control of Native Education* in 1971 by the Native Indian Brotherhood (NIB). What the NIB policy statement quite cleverly achieved was the fusion of the central recommendations of the Hawthorn Commission Report with the ideology of native self-determination.

The increasing political savvy of the Indians included an informed awareness of the political context and the opportunities it afforded. Since each province has legislative power to control its own education systems, considerable freedom exists within each province to create a unique system of native education. This, in turn, provides an opportunity for a well organized Indian political community to negotiate for specific local educational programs. For example, in the province of Alberta an amendment to the School Act in 1971 allowed for instruction in languages other than French and English. This amendment has been taken advantage of by different native groups and administrative units.

Thus, the publication Native People in The Curriculum was created by the Alberta Department of Education in 1985, which eventually led to the development of native-oriented programming, the generation of native learning resources and a publicly acknowledged involvement of native people in curricula and policy development for the first time. By 1986, the Native Education Project Fund was created by the Ministry of Education specifically for the development and delivery of programs and services to address the needs of native students in Alberta Schools.

By 1988, most of Canada's 577 Indian bands administered all or part of the educational activity of the federal Department of Indian Affairs on their reserves (Yuzdepski, 1983:1-2). Several persistent problems however plagued the institutionalization of educational self-governance on Indian Reserves. The national Indian political organization, the Assembly of First Nations pointed out that involvement in education was not synonymous with control of education, that " *local control* [did] not allow for decision-making and there [was] an overwhelming preoccupation with administrative procedures and financial control." (Assembly of First Nations, 1988: 2-5).

Community-School Interactions Among the Tsuu Tina Indians lessons learned: successes and failures

The case of the Tsuu Tina Indians appears to conform to the patterns of observed national educational norms. Historically, however, the results are inconclusive, because there has never been any tracking of individual bands by provincial school boards or by the Federal Government. In 1970, a consultants report noted that there was a general pattern of decline in Tsuu Tina students' grades and attendance in middle school. The students entering Junior High School, for example, were observed to miss a great deal of school and their grades were 15% below the class average. Less than 1% of the High School students were in academic programs and almost no boys were completing Grade 12 in city schools (Stanley & Associates, 1971:14).

In 1978, a second report commissioned by the Tsuu Tina Band indicated that the average for years of education was 8.7 for the 220 individuals interviewed out of a total population of 415. Of these individuals, 23 (10.4%) had completed or were enrolled in grade 12, 2 (9%) had university or college training and 42 (18.9%) had some form of trade or technical training.(Romney, 1978:4).

By 1988, the dropout rate for Tsuu Tina students was an estimated 80% and only seven Tsuu Tina students completed university over a twenty year period. By the end of the 1993-4 school term, a total of 27 Tsuu Tina students had dropped out of school including 10 of the 13 enrolled in High School.

During the school year 1994-1995, there was a total of 370 students attending Elementary, Junior and Senior High schools in the City of Calgary. The enrolment at the band-controlled school was 125 or approximately 75% of the eligible Elementary student population. A total of 15 different Junior and Senior High schools in the City of Calgary are attended by Tsuu Tina students. Forty adult students had enrolled in upgrading classes held on the Tsuu Tina Reserve. Thirty students completed the program successfully.

A recent study (Churchill, 1994) of attitudinal responses of teachers, administrators, parents and students in 1994 revealed that a wide range of attitudes were present in the Tsuu Tina educational "community." There are distinct differences between the teaching approaches of the city schools and the reserve school.

City schools:

Administrators and teachers in the city schools characterized Tsuu Tina students by poor attendance and poor attitudes towards education generally. The types of cultural factors contributing to poor student performance were identified as cultural discontinuity, different values, absence of native content in the curriculum and a lack of validation of native culture. All respondents felt that native students were isolated in the mainstream system.

All respondents noted that there are critical junctures in the educational experiences of these students. The first occurs at about grade 6 when Tsuu Tina students appear to become conscious of themselves as "different" and the second occurs during the Grade 9 transition to Senior High School.

Teacher respondents identified similar issues as administrators, including the non-involvement of parents in the schooling of their children and dysfunctional family life. Some teachers expressed considerable anxiety over the parenting responsibilities they felt that they had to assume for these students. Students were described as primarily shy or undisciplined. Few teachers identified cultural historical factors as issues but all those interviewed admitted that they knew next to nothing about the history and culture of the Tsuu Tina. Furthermore, all teachers agreed that Tsuu Tina student learning was a problem' and framed this in terms of developmental delay or skills deficit.

For the students, boredom was indicated as the critical factor in their schooling. They stated that schooling was worthless and would not guarantee them employment or advancement, particularly on the reserve. In the interviews, students who had dropped out or who were failing cited boredom, trouble with specific teachers and a feeling of purposelessness in their schooling.

Most students stated that they had experienced forms of overt racism in their schooling experiences. This racism had taken the form of name calling and other forms of verbal ridicule. Other problems mentioned included autocratic teaching styles, lack of cultural understanding, rudeness, singling out in class and racist comments.

Half of the students interviewed mentioned that family problems had influenced their schooling during the term. Only one student admitted to studying on a consistent basis and regularly completing work on time. All of the students described the importance of other successful Tsuu Tina students as an influence in their decision-making around schooling. The career and life ambitions of those students varied with about half expressing a desire to attend university or college and the other half uncertain.

The parent respondents reported similar experiences during their own schooling. All parents agreed that the education of their children was very important but all felt a complete dislocation from the education of their children.

Tsuu Tina reserve school

The philosophy and practice of teaching and learning within the elementary school operated by the Tsuu Tina provide an exemplary model of approaches to the successful education of these students. The school stresses several key elements including the validation of Tsuu T'ina and native cultures, the self-worth of the student and the provision of a safe and comfortable learning environment for the Tsuu T'ina student.

On a pragmatic level, the attainment of educational parity is addressed through the hiring of a reading consultant and other professionals to directly address reading and other learning deficiencies. There is an immediate activation of a response with direct parental involvement as soon as any problem arises. There is both strong community involvement and a proactive school advisory board. The location of the school on the Tusu Tina reserve and its employment of native architectural and design features had the immediate symbolic effect of enhancing community closeness and validating community values.

One of the strongest links between the school staff and the Tusu Tina Nation lies in the commitment of teachers to adhere to the values and wishes of the community. This commitment involved extra hours in helping to organize community-based activities. The teachers also attempt to utilize the community environment as a frame of reference in the learning process. The teachers roughly half of whom are native and half non-native - did not say that they employ any different teaching methods when working with the students. Instead, they emphasized a strong focus on the individual students, to give each of them a sense of worth as individuals and as members of their immediate community. To facilitate this process they use predominantly native curricular materials.

Lessons learned

As one analyst of comparative education noted: "neither the 'insiders' nor the 'outsiders have a monopoly on truth" (Khoi, 1990:112). Neither the state nor the community - Rom or Tsuu T'ina - are homogenous entities. In the case of the minority community, there are always divergent educational interests present and diverse educational needs to be addressed. Therefore, the framing of educational policy must accommodate this diversity. Therefore, it is the *choice* of educational alternatives which is the crucial factor.

The concept of *self-empowerment* similarly is complicated by the presence of a variety of perspectives in any one given community. For those favouring the participation of their children in the mainstream system, learning can be facilitated by the development of stronger native curricula, the hiring of native teachers and the greater visibility of native culture generally. Recommended structural changes in curricula include holistic teaching methods and the development of native language resources.

Bridging mechanisms can also be built between the community and the school including the hiring of liaison workers, the provision of cultural sensitization workshops so that teachers may be educated in the cultural and social norms of the community and the provision of career counselling relevant to community needs and requirements.

Student learning can be strengthened through forms of remediation including tutors, home study programs, home schooling and the use of advanced forms of technology. In the case of segregated schooling, the central problem is one of providing integrative mechanisms so that students can participate comfortably in main stream society.

The most basic lesson learned from observing the successes and failures in the education programs for the Tsuu T'ina is a caution against generalisations. The debate over segregation or integration is one such generalisation. Devising single "either-or solutions for all Indians, for all people in a tribe, or even for one community, will have problematic results because this approach ignores the fact that each individual evolves differently, reacts to the environment differently, and has taken a different position on the continuum between the two cultures. As seen from the interviews with Tsuu T'ina students, this position and self is influenced by the individual's friends and role models within the immediate community.

While the framing of Indian education policy is historically-based, it,is less clear how contemporary Tsuu T'ina attitudes towards education have been influenced directly by policies, which themselves have changed through time, and to what extent Tsuu T'ina themselves have been contingently affected by other historical factors. The problem of interpreting 'causality' within a rigid historicist framework in a perceived educational failure is, therefore, fraught with difficulty. The recent pronouncement by Barman et al (1988) that the history of educational policy up to the self-governance movement is a 'failure' leaves too many unanswered questions as to what constitutes this failure and in whose terms it is understood. There is instead a plurality of views present in any one case study which are as much a factor of contemporary circumstances and individual biography as they are of historical determinants

CONCLUSIONS

The evolution of native educational policy in the Canadian context represents the stresses and strains which exist within the broader nation-state and the provisions of the British North America Act (1867) which originally defined federal and provincial jurisdictions with regard to Indian administration. The integration of native culture within the multicultural framework model of Canadian society has never been accomplished. Native cultures therefore occupy an ambiguous and ill-defined role within this broad framework. The Roms' position is similarly problematic as Czech citizens with decidedly non-Czech culture.

The solutions for problems faced by Rom and Tsuu T'ina alike must arise from a *dialogue* between officials of the state and the community. On a local level, solutions must be found which are *both school and community-based* . In this regard, Indian communities are physically easier to access - they exist physically, they are visible and identifiable, whether on the reserves or as cultural centres at universities or museums, or as political headquarters. Rom communities are more difficult to find because they are much more fluid in nature as well as fragmented There are no reserves as a physical point of concentration, and even apartment blocks with large concentrations of Rom families are not necessarily communities in the sense of the occupants getting together to collaborate on some common purpose. A physical fixed site or structure that would identify the core of a community in the active or activist sense of the word "community", is not characteristic of the Roms in the Czech Republic. Building community around smaller starting points such as the 0-grade classrooms may therefore be a practical approach.

The fundamental basis of the politicization by minority groups around schooling has been the ideology that cultural solutions may be found for education problems. The corollary to this argument is that the removal of elements of culture have caused the problem in the first place and that these elements can be restored through self-governance in educational practice and policy. The rhetoric of this particular form of ideology permeates all educational discourse and is integrally linked with the idea that educational institutions represent a *fundamental means for socializing* children to the norms and mores of their society or origin.

These premises are however naive ones. The experiences with education of minority groups such as the Rom and the Tsuu T'ina illustrate that the school is *but one method of socialization* (Liegle, 1990:225). The elements of both culture and history in determining success may well be secondary to internal community dynamics which will create a new ethos of education. In this regard we have found the Spindlers, conception of culture as a dynamic process helpful.

References

Alberta Education. (1985). *Native Education Policy Statement. In* Program Policy Handbook. Edmonton: The Author.

Alberta Education. (1985). Native Education in Alberta. Edmonton: The Author.

Armstrong, R., J. Kennedy and P. R. Oberle (1990). University Education and Economic Well-Being Indian Achievement and Prospects. Ottawa: Indian and Northern Affairs Canada.

Assembly of First Nations (1988). Tradition and Education. Ottawa: Assembly of First Nations.

Bacikova, Eva. 1959. *Kul turne vychovna Brace mezi cikanskym obyvatelstvem.* Prace mezi cikanskym obyvatelstvem, s. 31-45.

Bacikova, Eva. 1959. *Cikansky lid na novych cestach* Co vas zajima, roc,1959, c. 6.

Balabanova, Helena, 1995. Prakticke zkusenosti se vzdelavanim romskych deti Praha: MENT.

Barman, J., Y. Hebert and D. McCaskill (1988), *The Legacy of The Past* In Indian Education in Canada Vol. 1: The Legacy, Vancouver: University of British Columbia Press, 1988.

Canadian Almanac (1996). Canadian Almanac and Directory. 1996, Toronto: Canadian Almanac and Directory Publishers Ltd.

Churchill, E. (1994). May Our Children Walk in Beauty: A Contextual Study of Educational Self-Governance in The Tsuu T'ina Community. Unpublished Report. University of Calagary.

Davidova, Eva. 1995. Cesty Romu 1945-1990. Olomouc: Univerzita Palackeho. pp. 242.

Davidova, E. (Zabranova). *1959. K otazce ethnografickeho studia cikanskeho obyvatelstva v Ceskoslovensku.* Ceskoslovenska etnografie VII, s. 99-102.

Government of Canada, Department of Citizenship and Immigration (1969). Indian Education. Ottawa: The Queen's Printer.

Indian and Northern Affairs Canada (1989). Indian Services Sector. (Ottawa: INAC).

Indian and Northern Affairs Canada (1992). Schedule of Indian Bands, Reserves and Settlements Including Membership and Population Locations and Area in Hectares.

Indian and Northern Affairs Canada (1995) Ottawa: INAC. Basic Departmental Data.

Khoi, L. T. Ottawa: (1990). *Conceptual Problems in Inter-Cultural Comparisons.* In J. Schriewer and B. Holmes (eds.), Theories and Methods in Comparative Education. New York: Peter Lang. pp. 87-113

Kotasek, Jiri, and Richard Ruzicka. *1994. Training in Intercultural Education for Primary school Teachers in the Czech Republic.* Prague: UNESCO IBE Report.

Liegle, L. (1990). *Forgotten Traditions and New Dimensions in Comparative Education.* In J. Schriewer and B. Holmes (eds.), Theories and Methods. in Comparative Education. New York: Peter Lang, pp. 225-262.

Lipa, Jiri. 1965. *Cikanstina v jazykovem pros tredi slovenskem a ceskem: k otezkam starych a novejsich slozek v jeji gramatice a lexiku.* Praha: Nakladatelstvi Ceskoslovenske Akademie Ved. Sesit 11, Rocnik 75.

Lipa, Jiri. 1963. Prirucka cikanstiny. Praha: Ministerstvo Skolstvi a Kultury.

Lipa, Jiri. 1960. *Poznamky k otazce cikanskych prvku v ceskem argotu.* Rusko-ceske studie (Sbornik Vysoke skoly pedagogicke v Praze, Jazyk a literature II), s. 47-56, Praha.

Mateju, Petr and Blanka Rehakova. *1996. Education as a Strategy for Life Success in the Postcommunist Transformation: The Case of*

the Czech Republic. Comparative Education Review. Vol 2, May. . 40, No.

Ministry of Education, Youth and Sports. Policy for funding basic education 27.10.95. Praha.

Ministry of Education, Youth and Sports. Directive to schools concerning action against expressions of racism 18.8.95. Praha.

Ministry of Education, Youth and Sports. 1992 Fund for the development of university education- summary of programs and disbursements (FR VS). Praha.

Ministry of Education, Youth and Sports. Grants to Rom communities (Podklady za skupinu 5)

Ministry of Education, Youth and Sports. Inspectors' Report on Impact of Directive on Action Against Expressions of Racism, Czech Inspectorate, 1996.

Ministry of Education, Youth and Sports. 1996. National census 1991 statistics and analysis concerning Rom education. Praha.

National Indian Brotherhood (1972). Indian Control of Indian Education. Ottawa: National Indian Brotherhood.

Office of the Nationalities Council of the Czech Republic Government. Minutes of meeting of government and Rom representatives. April 1996. Praha.

Rauchova, Marie et al. *1993 . Vzdelavaci programy pro Romskou populaci . /Educational* programs for Romany population./ Project FRS. Prague: Faculty of Education, Charles University.

Romney, J. A (1978). Motivation Project. commissioned by the Tsuu T'ina Nation. Unpublished Report

Sebkova, Hana. 1995. Jazykova situace Romu a jeji vyvoj. Praha: MENT.

Spindler, George and Louise Spindler. 1993. *The Process of Cul ture and Person: Cul tural Therapy and Cul turally Diverse Schools.* In Renegotiating Cultural Diversity in American Schools. Patricia Phelan and Ann Locke Davidson (Eds.). New York: Teachers ' College Columbia University, pp. 27-49.

Stanley & Associates Engineering (1971). A Socio-economic Survey of The Sarcee Indian Reserve. Calgary: The Author.

Sulitka, Andrej. 1996. Secretary of the Office of the Nationalities Council of the Czech Republic Government; interview, October.

Tsuu T'ina Nation. Tsuu T'ina Pride, 1(2) , 1995.

Whitney, Susan. Tsuu T'ina Education Committee, Interview, 12 May, 1994.

Wison, Anton. 1994. Prometheus Rising. Tempe, Arizona: New Falcon Publications.

Yuzdepeki, I. (1988) . *Indian Control of Indian Education.* Canadian Journal of Native Education, 11 (112), pp. 37-47.

NOTE

In 1991, the total Canadian population was 27,296,859 and the total registered Indian population was 533,189. The latter figure does not include Metis or Inuit or other individuals who may claim Indian status based on amendments to the Indian Act in 1985. Sources: Canadian Almanac and Directory, 1996:6086 and Indian and Northern Affairs Canada, Schedule of Indian Bands, Reserves and Settlements, 1992:177).

MULTIPLE INTELLIGENCES: IMPORTANCE FOR TEACHER EDUCATION

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INTRODUCTION

We as practitioners are continually striving to improve the quality of teacher education programs and to enhance teaching and learning effectiveness of all children. One theory that has received considerable attention over the past decade is the problematic applications of multiple intelligences theory in the classroom based on the empirical studies and writings of Howard Gardner. Gardner, a Harvard University psychologist and neuropsychologist by training, and his colleagues, Myra Krechevsky and Thomas Hoerr founded the Harvard Project Zero through the Graduate School of Education at Harvard. Krechevsky (1991) is Director of Project Spectrum at Harvard Project Zero and Hoerr is Director of the New City School in St. Louis, Missouri. The interest of educators in multiple intelligences has had a profound effect on Gardner and his colleagues at their research group. There are now dozens, possibly hundreds, of experiments underway in educational institutions all over the country and numerous books and articles have been written on the implications and implementations of multiple intelligences in the classroom.

Since the decade following the publication of Gardner's Frames of Mind: The Theory of Multiple's Intelligences (1983), numerous educators and specialists (Armstrong, 1994; Campbell, 1996; Chapman, 1993; and Lazear, 1991), have written extensively on "the how of implementation" and making the transition from theory into practice in addition to Gardner (1993) and Gardner and Hatch (1989). In a recent article Gardner writes that "a silence of a decade's length is sometimes a good idea" and ~,..was unprepared for the large and mostly positive reaction to the theory among educators...the commerce between theory and practice has been continuous and mostly productive" (1995, p. 201, 202).

According to Chapman (1993) " There are many misconceptions about intelligence. One misconception, disproven the modem research of of and Rand and others, is that all intelligence is fixed. That misconception argues that individuals die with the same intelligence with which they are born. Another one, disproven by modem research, is that there is only one intelligence" (p. 1). Many scholars of intelligence have contributed to the debunking of these misconceptions as they have explored the inner frontiem of the human brain (Feldman, 1984; Gardner, 1991a, 1991b; and Gardner and Hatch, 1988). Campbell (1996) writes that it is important to "recognize the intelligence in our mind/body systems, but also to realize that it is possible to create 'smart environments' in which to live and ream. (p. xxi).

krechevsky, Hoerr, and Gardner (1995 in Oakes and Quartz) wrote that "the assertion that all normal human beings possess at least seven separate intellectual potentials-only two linguistic and local mathematical! of which are normally covered by the psychological concept of intelligence apparently struck a responsive chord among educators. (p. 166). The vociferous attack on short-answer standardized tests and the call for assessment of the range of human intelligences--in an 'intelligence fair' way-- were messages that many American educators were ready-even eager-to hear" (Krechevsky, pp. 166, 167). Gardner and his colleagues hold that every individual possesses several different and independent capacities for solving problems and creating problems. according to Gardner, ...a human intellectual competence must entail a set of skills for problem solving- the individual to *resolve genuine problems or difficulties* that he or she encounters and when appropriate, to create an effective product-and must also entail the potential for finding or creating problems--thereby laying the groundwork for the acquisition of new know edge...the ideal of what is valued will differ markedly, sometimes even radically, across human cultures, within the creation of new products or posing of new questions being of relatively little importance in some settings. (Gardner, 1983, pp. 60-61 61 in Chapman, 1993 pp. 1-2)

In the face of increasing cultural and emerging emerging on cognitive and developmental psychology, educators more than ever need new ways of understanding how children think. Siegler (1994) wrote on "pervasive variability. and stated that "variability in chlidren's thinking exists at every level--not just between children of different ages, or between different children of the same age, but also within an individual solving a set of related problems" (p. 1). The work of (Chase and Ericsson, 1981; Ericsson, Krampe, and Tesch-Romer, 1993; and Straszewski, 1988) demonstrates that "the human cognitive system is remarkably malleable with concentrated practice...the data make it clear that in the course of overall increase in skill level, significant variability in performance and in the specific strategies applied is the norm" (Kuhn, 1995, p. 135). Utilization of the MI theory taps into this wide range of variabilities in children's thinking and reaming.

Human intelligence encompasses a richly textured mental landscape which is easily trivialized by IQ scores and then placing the infamous labels, as smart, average, or slow, on those children. The multiple intelligences theory moves away from the traditional mode of thought of "How Smart are you?" to "How are you smart?. (Gardner, 1983; Gardner 1991; Gardner 1993a; and Gardner 1993b). In contrast to these all-too-common ways of thinking about children, the theory of multiple intelligences provides a lens to distinguish the diverse ways that children are able to solve important problems and fashion valuable products. As a psychological theory, "the multiple intelligence perspective does not in itself dictate a particular way to proceed. Rather as detailed in Frames of Mind and many other publications, MI theory is a claim abut the evolution of the human mind/brain. (Krechevsky et al., p. 167).

THEORITICAL BACKGROUND

It is of the utmost importance that we recognize and nurture all of the varied human intelligences, and all of the combinations of intelligences. We are ah so different largely because we all have different combinations of intelligences. If we recognize this, I think we will have at least a better chance of dealing appropriately with the many problems that we face in the world. (Gardner, 1987).

In 1904, Alfred Binet, a French psychologist, and a group of his collegues, were asked by the French Minister of Public Education to develop a means of determining which primary grade students were "at risk" for school failure so these students could receive remedial attention. Out of their efforts came the first intelligence tests and several years later, those intelligence tests were imported to the United States (Armstrong, 1994. p. 1). Testing became widespread and the notion that something called "intelligence" was born, existed, and could be measured by a single score, namely the IQ score.

Some eighty years later, Gardner (1983) questioned the validity of determining an individual's intelligence through the practice of asking him to take tests or perform isolated tasks he's never done before. Gardner suggested that intelligence has more to do with the capacity for solving problems and fashioning products in a context-rich and naturalist setting. In a 1996 video presentation (Denozzi), MI: Intelligence Understanding, and the Mind Gardner defines intelligence as "not having anything to do with tests but rather as the ability to solve problems, or to make things which are valued in at least one culture" In this video, Gardner introduces the newest intelligence called Naturalist Intelligence and cites Darwin as an example of an individual who demonstrated this intelligence.

The writings of Vygotsky support the theory of biological intelligence or the "givens' within his theoretical framework (Vygotsky 1978, pp. 37,39, 46 in Martin, Nelson, Tobach, editors, 1995 p. 49). However, he saw the 'givens' as elementary behavior that has evolved (biological evolutions) and that the higher mediated levels are culturally derived (human history) (pp. 45-49). Vygotsky's theories support Gardner's definition of intelligence of some value to culture and having cultural relevance. Ragoff, Radziszewska, and Masiello state that the "sociocultural approach inspired by Vygotsky and Leont'ey provide many sociocultural scholars with the common language and perspective, particularly in the concept of "activity' and the importance of integrating levels of analysis (1995, in Martin, Nelson, and Tobach, pp. 126-126). The works of G. H. Mead and of Dewey also contributed to the sociolcultural approach and of more recent writings from sociology, psychology and anthropology (Martin, pp. 126-1273.

Even in the wake of the Cognitive Revolution, me old view of the mind still underscores many dominant theories about intelligence. In the recent publication of the book The Bell Curve, Herrnstein and Murray (1994), capture the traditional view of intelligence as a single thing that we're born with it. Gardner, who disagrees with this controversial book, reiterates that the theory that there isn't much we can do about it and that psychologists can tell you how smart you are, still pervades modern thinking.

THEORITICAL BASIS FOR MI THEORY

To provide a sound theoretical foundation for his claims, Gardner set up certain basic tests that each intelligence had to meet to be considered a full- fledged intelligence and not simply a talent, Skill or aptitude. The criteria he used include the following eight factors:

1. **Potential isolation by Brain Damage.** Gandner argues for the existence of seven relatively autonomous brain systems--a more sophisticated and updated version of the right-brain/left-brain model that was popular in the 1 970's. This factor determines for example, that a person might have a substantial portion of his linguistic intelligence damaged, and thus experience great difficulty speaking, reading, or writing yet might be able to sing, do math, or dance.

2. **The Existence of Savants, Prodigies, and Other Exceptional individuals:** Single intelligences may operate at very high levels in some individuals, such as savants, and in those same individuals, function very low in other intelligences.

3. **A Distinctive Developmental History and a Definable Set of Expert "End-State" Performances:** intelligences are galvanized by participation in some kind of culturally valued activity and the individual's growth in such an activity follows a development al pattern Each intelligence-based activity has its own developmental trajectory. For example, musical composition arrives very early; higher mathematical expertise arrives later and declines after age forty, and linguistic intelligence often appears after the age of fifty and even older.

4. **An Evolutionary History and Evolutionary Plausibility** Gardner concludes that each of the seven intelligences meet the test of having its roots deeply embedded in the evolution of human beings, and even earlier, in the evolution of other species For example, spatial intelligence can be studied in cave drawings and musical intelligence can be traced back to archeological evidence. MI theory also has a historical contest. Certain intelligences seem to have been more important in earlier times than they are today. Bodily-kinesthetic was valued more a hundred years ago in the United States than today as it was necessary for man to hum, harvest grain, and build homes for survival.

5. **Support from Psychometric Findings:** Standardized measures of human ability provide the "test" that most theories of intelligence use to ascertain the validity of a model. Examining many of the existing standardized tests provides support for the theory of multiple intelligences. For example, the Wechsler intelligence Scale for Children includes sub tests that require linguistic intelligence, logical-mathematical intelligence, and others.

6. **Support from Experimental Psychological Tasks**: Gardner that by looking at specific psychological studies, we can witness intelligences working in isolatio from one another in studies of cognitive abilities such as memory, perception, or attention, individuals possess selective abilities. Individuals may have a superior memory for words but not for faces. People can demonstrate different levels of proficiency across the seven intelligences in each cognitive area.

7. **An identifiable Core Operation or Set of Operations:** Each intelligence has a set of core operations that serve to drive the various activities indigenous to that intelligence. In musical intelligence. those components may include sensitivity to pitch or the ability to discriminate among various rhythmic structures

8. **Susceptibility to Encoding in a Symbol System:** One of the best indicators of intelligence behavior is the capacity of human beings to use symbols. Each of the seven intelligences meets the criterion of being able to be symbolized. (Gardner, 1983).

Project Spectrum began in 1984 as an attempt to investigate whether distinctive intellectual profiles could be identified in children as young as three or four years of age. At issue was whether one could create materials that could elicit children 's intellectual strengths. and if so, could the resulting profiles provide support for the claims of MI theory if it turns out that significant differences can be discerned at the time of the first formal schooling educators are accordingly challenged to create approaches and milieus which are sensitive to the differences between a child who exhibits a standard "scholastic" profile and a child who is strong In music, spatial or personal intelligence=

(Krechevsky et al., p. 170). Based on Gardner's theory and the work of psychologist David Feldman (1994) on development in nonuniversal domains the research team created a set of fifteen assessment activities in seven domains that drew on a variety of intelligences that are valued by our society (Krechevsky et al., pp. 170-171). The seven intelligences are defined below:

THE SEVEN INTELLIGENCES DESCRIBED

- **LINGUISTIC INTELLIGENCE:** The capacity to use words effectively, whether orally (e.g., as a storyteller, orator, or politician, or in writing (e.g., as a poet, playwright, editor, or journalist). This intelligence includes the ability to manipulate the syntax or structure of language. the phonology or sounds of language, semantics or meanings of language. and the practical uses of language,

- **LOGICAL-MATHEMATICAL INTELLIGENCE**: The capacity to use numbers effectively (e 9, as a mathematician. tax accountant, or statistician, and to reason well (e.g., as a scientist. computer programmer, or logician). This intelligence includes sensitivity to logical patterns and relationships

- **SPATIAL INTELLIGENCE**: The ability to perceive the visual-spatial world accurately (e.g. a hunter. scout, or guide) and to perform transformations upon those perceptions (e.g., as an interior decorator. architect, artist, or inventor) This intelligence includes sensitivity to color line, shape, form space, and the relationships that exist between these elements.

- **BODILY-KINESTHETIC INTELLIGENCE:** Expertise in using one's whole body to express ideas and feelings (e.g., as an actor, a mime, an athlete, or a dancer) and facility in using one's hands to produce or transform things (e.g., a craftsperson, sculptor, mechanic, or surgeon) This intelligence includes special skills, such as, coordination, balance, dexterity. strength, flexibility, and speed

- **MUSICAL INTELLIGENCE** The capacity to perceive (e 9., as a music aficionado) discriminate (e.g., as a music critic), transform (e.g., as a composer), and express, (e.g., as a performer), musical forms This intelligence includes sensitivity to the rhythm, pitch. timbre, or tons color of a musical piece

- **INTERPERSONAL INTELLIGENCE**: The ability to perceive and make distinctions in the moods, intentions, motivations, and feelings of other people This can include sensitivity to facial expressions, voice, and gestures; the capacity for discriminating among many different kinds of interpersonal cues and respond effectively (e.g., to influence a group of people to follow a certain line of action)

- **INTRAPERSONAL INTELLIGENCE:** Self-know/edge and the ability to act adaptively on the basis of that knowledge This intelligence includes having an accurate picture of onesself (one s strengths and limitations); awareness of inner moods, intentions, motivations, temperaments. and desires and the capacity for self-discipline, self-understanding. and self-esteem (Gardner 1983).

IMPLICATIONS FOR TEACHER EDUCATION

Around the country over the past decade, schools have incorporated multiple intelligences into their programs. Multiple intelligence theory is not a fixed program and Gardner has expressed a wish not to personally supervise a burgeoning multiple-intelligence empire so may approaches have been developed and implemented in schools. MI theory is more accurately described as a philosophy of education and attitude toward learning. Therefore, it offers educators and those of US in teacher education, a broad opportunity to creatively adapt its fundamental principles to any number of educational settings. It has particular implications as a supplemental text or approach to be taught for teachers in training of schools of education and as a resource for teachers looking for new ideas to enhance their teaching experiences.

There are basic points of the MI theory that carry relevance in the preparation of teachers for our future children. The first important point is that each person possesses all sever intelligences. MI theory is not a 'type theory for determining the one intelligence that fits (Armstrong p. 11). it is a theory of cognitive functioning, and it proposes that each person has capacities in all seven intelligences (Gardner 1983; Gardner 1987; and Armstrong 1994).

Secondly, most people can develop each intelligence to an adequate level of competence. It is the role of the classroom teacher to assist and guide children in the development of those competencies. Thirdly no one intelligence exists by itself in life as intelligences are always interacting and are intertwined (development of the whole child). And lastly, there are many ways to be intelligent within each category MI theory emphasizes the rich diversity of ways in which people show their gifts within intelligences as well as between intelligences The issue of diversity (cultural and ethnicity) is paramount in the training of teachers of today in teaching children ranging from those who are mentally or physically challenged to children identified as gifted by current Federal criteria it is especially important that students encountering an intelligence in the early stages experience a classroom that facilitates the development of the various intelligences Such a classroom is rich with posters bulletin boards, learning centers, activities, and lessons that promote development in all areas.

MULTIPLE INTELLIGENCE TEACHING METHODS

There are a number of teaching tools in multiple intelligence theory that go beyond the traditional teacher-as-lecturer mode of instruction. There are a number of means teachers may choose to enrich their teaching within the single classroom. Some of these include (1) promoting a variety of intelligences, (2) restructuting lessons and units to target different intelligences, (3) integrating the curriculum around the multiple intelligences, (4) responding to individual needs. and (5) making holistic, leaner-centered outcomes. The following chart provides a summary of MI teaching methods and strategies that can be used by the classroom teacher according to the seven intelligences:

240

Multiple Intelligences Teaching Tools

VRBAL/LINGUISTIC
Rading
Vocabulary
Formal Speech
Journal/Diary keeping
Creative Writing
Poetry
Verbal Debate
Impromptu Speaking
Humor / Jokes
Storytelling

LOGICAL / MATHMATICAL
Abstract Symbols
Qutlining
Graphic Organizers
Number Sequences
Calculation
Deciphering Codes
Forcing Relathionships
Syllogisms
Problem Sloving
Pattern Games

VISUAL / SPATIAL
Guided Imagery
Active Imagination
Color Schemes
Patterns / Designs
Painting
Drawing
Mind-Mapping
Pretending
Sculpture
Pictures

BODILY/KINESTHETIC
Folk / Creative Dance
Role Playing
Physical Gestures
Drama
Martial Arts
Body Language
Physical Exercise
Mime
Inventing
Sports Games

MUSICAL / RHYTHMIC
Phythmic Patterns
Vocal Sounds / Tones
Music Composition / Creation
Percussion Vibrations
Humming
Enviornmental Sounds
Instrumental Sounds
Singing
Tonal Patterns
Music Performance

INTERPERSONAL
Giving Feedback
Intuiting Others' Feelings
Cooperative Learning
Person-to-Person Talks
Empathy Practices
Division of Labor
Collaboration Skills
Receiving Feedback
Sensing Others
Group Projects

Note: *The following three pages outline the data results of a research project recently completed in two middle schools. General trends that appeared are presented on the following two charts Students completed an adapted short-form version of a questionnaire by Gardner and Sternberg The actual survey utilized is included along with a chart for self-assessment.*

PROJECT OVERVIEW

IMPLEMENTING MULTIPLE INTELLIGENCE IN THE MIDDLE SCHOOL CURRICULUM

- Surveyed sample of students from two middle schools
- Collected additional information (Iowa Test of Basis Skills and Classroom Achievement)
- Tallied scores by location, sex, and grade level
- Reviewed trends, (sex, location, grade level, and classroom achievement)

- Reviewed correlation to ITBS achievement

SURVEY POPULATION

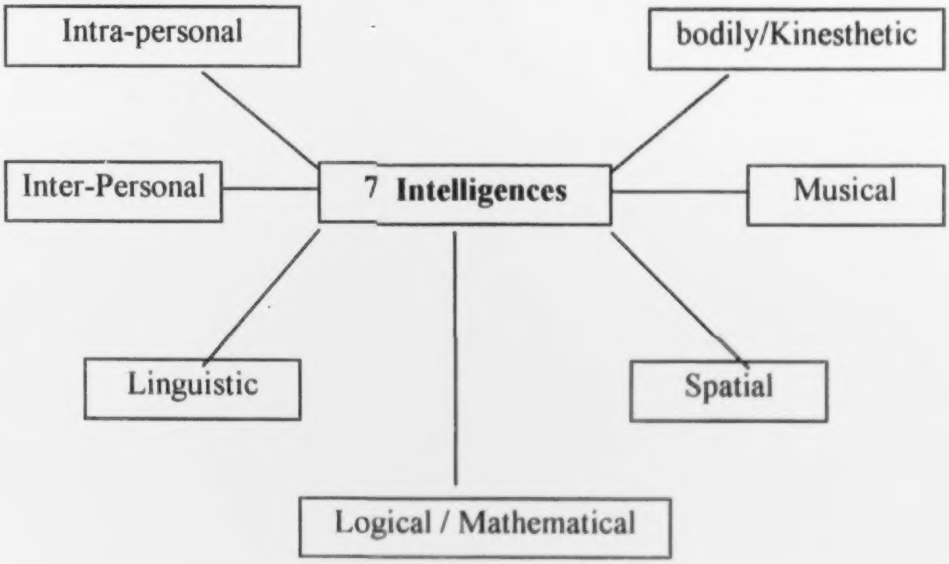
MIS# 1	87 students	MIS # 2	48 students	TOTAL	135 Students
	28 6th grade		48 7th grade		28 6th grade
	20 7th grade		23 male		68 7th grade
	39 8th grade		25 female		39 8th grade
	35 male				58 male
	52 female				77 femal'

Overview of Results
General Trends

	General Trends (s)
VERBAL INTELLIGENCE	• Females moe verbal than males • Large jump in verbal score from 6th to 7th grade. • Larger decline from 7th to 8th.
MATH INTELLIGENCE	• Males more mathematical than females. • Large jump in math score from 6th to 7th grade. • Larger decline from 7th to 8th.
VISUAL INTELLIGENCE	• Visual generally lowest area. • Males slightly more visual. • Large jump in 7th grade. • Decline in 8th grade.
KINESTHETIC INTELLIGENCE	• Males more kinesthetic. • 7th grade highest score. • 8th grade lowest score.
MUSICAL INTELLIGENCE	• Musical highest area. • Increase from 6th to 8th grade (steady) • Females more musical than males.

Overview of Results
General Trends (cont.)

	General Trends (s)
INTRAPESONAL INTELLIGENCE	• 7th grade most intrapersonal • Males and females even. • Large drop into 8th grade.
INTERPERSONAL INTELLIGENCE	• 7th grade most interpersonal. • 6th and 8th even. • Females slightly higher than males.


Intra-personal
bodily/Kinesthetic
Inter-Personal
7 Intelligences
Musical
Linguistic
Spatial
Logical / Mathematical

Letter	Area	Questions
A	Verbal/Linguistic	9, 10, 17, 22, 30
B	Mathematical	5, 7, 157 20, 25
C	Visual/Spatial	1, 11, 14, 23, 27
D	Kinesthetic	8, 16, 19, 21, 29
E	Musical	3, 4, 13, 24, 28
F	Intrapersonal	2, 6, 26, 31, 33
G	Interpersonal	12, 18, 32, 34, 35

HOW ARE YOU SMART?

(Adapted from Stemberg and Gardner)

Read each statement carefully and if it sounds true for the most part, mark a "T" for true. If it doesn't, mark "F" for false. If the statement is sometimes true, sometimes false, leave it blank.

1.---------- I'd rather draw a map than give someone verbal directions.
2.---------- If I am angry or happy, I usually know exactly why.
3.---------- I can play (or used to play) a musical instrument.
4.---------- I can associate music with my moods.
5.---------- I can add or multiply quickly in my head.
6.---------- I can help a friend sort out strong feelings, because I have successfully dealt with similar feelings myself.
7 ---------- I like to work with calculators and computers.
8.---------- I pick up new dance steps easily.
9.---------- It's easy for me to say what I think in an argument or debate.
10.---------- I enjoy a good lecture, speech, or sermon.
11.---------- I always know north from south no matter where I am.
12.---------- I like to gather together groups of people for parties or special events.
13.---------- Life seems empty without music.
14.---------- I understand the drawings that come with new gadgets/appliances.
15.---------- I like to work puzzles and play games.
16.---------- Learning to ride a bike (or roller blade/skate) was easy for me.
17.---------- I am irritated when I hear an argument or statement that sounds illogical
18.---------- I can convince people to follow my plans.
19.---------- My sense of balance and coordination is good
20.---------- I often see patterns and relationships between numbers faster and easier than others.
21.---------- I enjoy building models (or sculpting).
22.---------- I'm good at finding the fine points of word meanings.
23.---------- I can look at an object one way and see it turned sideways or backwards just as easily.
24.---------- I often connect a piece of music with some event in my life.
25. --------- I like to work with numbers and figures.
26 ---------- I like to sit quietly and reflect on my inner feelings.
27.---------- Just looking at shapes of buildings and structures is pleasurable to me.
28.---------- I like to hum, whistle, and sing in the shower or when I'm alone.
29.---------- I'm good at athletics.
30.---------- I enjoy writing detailed letters to friends.
31.---------- I'm usually aware of the expression on my face.
32.---------- I'm sensitive to the expressions on other people's faces.

33.---------- I stay in touch with my moods and have no trouble identifying them.
34.---------- I am sensitive to the moods of others.
35.---------- I have a good sense of what others think of me.

References

Armstrong T (1994) Multiple intelligences in the classroom Alexandria, VA: Association for Supervision and Curriculum Development.

Campbell, L, Campbell, B., & Dickinson, D (1996) Teaching & Learning through Multiple Intelligences. Needham Hgts., MA: Allyn & Bacon

Chapman, C. (1 993). If the shoe fits...How to develop multiple intelligences in the classroom. Arlington Hgts., IL: IRI/Skylight.

Denozzi, R (Producer). (1996). [Review of the video program Howard Gardner: MI: Intelligence. understanding and the mind Los Angeles: into the Classroom Media

Feldman, D H (1994) Beyond universals in cognitive development Norwood, NJ: Ablex.

Gardner, H (1983) Frames of mind: The theory of multiple intelligences. New York: Basic Books.

Gardner H (1987) Beyond IQ: Education and human development. Harvard Educational Review. 57(2). 187-193

Gardner.H (1991a). To open minds. New York: Basic Books Gardner,H (1991b) The unschooled mind: How children think and how schools should teach New York: Basic Books.

Gardner, H. (1993) Frames of mind: The theory of multiple intelligences Tenth anniversary ed.) New York: Basic Books

Gardner, H (1993) Multiple intelligences: The theory in Practice New York Basic Books.

Gandner, H (1995) Reflections on multiple intelligences: Myths and messages. Phi Delta Kappan, 77, 200-203, 206-209.

Gardner, H & Hatch, T (1989). Multiple intelligences go to school. Educational Leadership, 18(8) 4-10

Gardner. H & Hatch, T. (November/December 1988) New research on intelligence Learning, 17(4) 37-39

Hermstein, R. & Murray, C. (1994) The bell curve. New York: Free Press.

Krechevsky, M (1991) Project Spectrum: An innovative assessment alternative. Educational Leadership. 48 (5), 43-48.

Krechevsky, M.. Hoerr, T. & Gardner, H. (1995). Complementary energies Implementing MI theory from the lab and the field in J. Oakes & K H Quartz (Eds), Creating new educational communities Schools and classrooms where all children can be smart: 94th National Society for the Study of Education Yearbook Chicago: University of Chicago Press

Kuhn D (1 995) Microgenetic study of change: What has it told us? Psychological Science, 6, 133-139

Lazear, D (1991). Seven ways of teaching The artistry of teaching with multiple intelligences. Arlington Hgts., IL: IRI/ Skylight.

Siegler R. 5 (1994) Cognitive variabilty: A key to understanding cognitive development Current Directions in Psychological Science, 3, 1-3

Rogoff, B.. Radziszewska, B., & Masiello, T Analysis of developmental processes in L. Martin, K Nelson, & E. Tobach (Eds.). Sociocultural psychology: Theory and Practice of doing and knowing. New York. Cambridge University Press.

Sternberg, R J (1984). Beyond IQ: A triarchic theory of human intelligence. New York: Cambridge University Press.

Vgotsky, L. S (1978). Mind in Societv. In L. Martin, K Nelson, & E. Tobach (Eds) Sociocultural psychology: Theory and Practice of doing and knowing New York. Cambridge University Press.

TEACHERS AS LISTENERS

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In today's world, students, even more than perhaps at any other time, need teachers who will listen to them. This fact was brought home very forcefully to me this summer when I served as a counselor at a summer camp for a week. I taught a class each day, went swimming, hiking, and boating with my campers who ranged in age from 13 to 18, and most importantly, I slept in the same cabin with them each night. It was through this week-long 24 hours a day association with them that I got to know them at least a little. I was amazed at the problems these 12 young women from middle class homes in rural United States were facing. Three came from homes which had been wracked by divorce. One of the young women had been secularly abused and another, a fifteen year-old, was pregnant. They need and responded to a caring adult who would listen.

As I returned home from my camping experience and began to plan for yet another year of college teaching, my mind turned to planning for my Social Studies Methods Class which I teach each fall. In addition to teaching several United States History classes each year, I also teach this class to seniors who are about to embark on student teaching. It is their last year before graduation and entering the job market as young teachers. Although I have always encouraged my young student teachers to be interested in their students, now I wanted to make listening a definite part of their training. [1]

How could I pan a course of study which would train and encourage young student teacher s to be better listeners? I wrote several parts of my program into the class syllabus. We would have a trained speaker who conducted workshops throughout the community on listening. We would invite students from the local high schools to come to class and voice their concerns. I had attended a workshop on multiple intelligences and could incorporate Howard Gardner's theories into discussing the various learning styles which students have and how teachers could use these theories to understand and teach their students.

Part of my university's requirements for the methods courses is 14 hours of observation in the local schools and 1 hour of teaching. We could use those observation and teaching hours to encourage the young student teachers to begin talking with and listening to their students.

We could practice different ways of asking questions in class and then also discuss how teachers could use students' responses to build better lessons.

As we discussed and practiced various discipline techniques, we could also incorporate the principle that good listening often forestalls discipline problems. Or it can be used as one of the means of dealing with them.

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[1] It is surprising that educational journals carry articles about teaching listening skills for teachers of elementary students but not for teachers of secondary students. See: Rebecca Brent and Oatricia Anderson, "Developing Children's Classroom Listening Strategies" The Reading Teacher. Vol. 47. N2, October 1993. Pp. 122-126. Lisa Siemens, "Does Jesus Have Aunties" and "who Planned It All"? Learning to Listen for "Big" Questions. Z" Language Arts, Vol. 71, n 5. September 1994. Pp. 358-361. A notable exception to this rule is Maureen Barbieri's Sounds from the Heart, Learning to Listemto Girls, Portsmouth NH: Heinemann, 1955.

As their teacher, I could try to model good listening techniques. I would be available for questions and concerns before and after class and in office hours. I also instituted the practice of having the students write a "Letter to the Teacher" after our weekly three hours and fifteen minute classes. They would write their comments and then I would answer them. This proved to be an important listening device.

On the first week of class, my students and I got acquainted. We each told a little about ourselves. As one students commented, "It made it easier to talk when we all knew something about each other".[2] We also read and discussed an article concerning a study which indicated that students who had some educational methods classes before they began teaching were better prepared to teach.[3]

The second week, our speaker came and led us in approximately an hour's worth of exercises in listening. Here is what the students said about the presentation. "I enjoyed the listening stuff", "I thought that the listening workshop was very interesting and I think will be helpful in the future". " I really enjoyed the guest speaker (who) taught me a few things I didn't realize about listening." "The listening workshop.. showed me some good skills that I had never known / realized. I think the listening skills will help me as a teacher. " "I enjoyed Mrs. Beukema's talk although some of the exercises were hokey. The exercises did help to drive the point home". " I found that I have to work on my listening skills and her being here made me realize that".[4]

On our next class meeting, we were visited by Lonnie, a young high school student. She told us something about herself and then we had nearly an hour long question and answer session. She told us the things she liked about school and the things she disliked. She discussed her goals and concerns. The college students had many questions for her. She also had an important question for them. She wanted to know why they wanted to be teachers. She said, "If you are thinking about teaching, you should think about why you want to be a teacher. " My students were quiet for a time following her question. They were not prepared at that time to actually put their reasons for choosing teaching as a vocation into words before their peers and the searching eyes of a young student.

At the' end of class, the students wrote their comments concerning Lonnie's visit. Students wrote: "I thought tonight's discussion with Loni was very worthwhile", To get a view of a high school student helps me for the future and gives me ideas for the future." "It was really helpful to get the input of a high school student." "It was really helpful to get the input of a high school student" "I thought it was very interesting to have the high school student in our classroom. It gave me some insight on what high school students think about social studies and high school in particular. Hopefully I can use some of her insight in my classroom to be a more effective teacher." " I also like the discussion with the high school student. I believe it was very rewarding to hear her points of interest." "It was very informative to have Lonnie come to class". " The high school student provided some valuable insights into what she perceived a teacher should be." "She seemed very honest and helpful. Maybe I will try to set up an individual meeting with a student after I do a lesson while observing." "I thought the question answer period with the high school student provided valuable insight and was beneficial to the whole class. It was interesting to hear a student talk honestly & open about school, students, and problems at the high school." [5]

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[2] Student Responses, "Letter to the Teacher" /aygyst 26, 1996.

[3] "Research, A Study in Contrast: Sources of Pedagogical Content Knowledge for Secondary English." Journal of Teacher Education Septbember - October 1989, pp. 24-31.

[4] Student Responses, "Letter to the Teacher", September 16, 1996.

In the discussion after the student left, one of the college students remarked that he was surprised that a high school student could be so intelligent and express herself so well. One student wrote that he was "greatly impressed by her and told her so" [6] As for Lonnie, when I thanked her for coming, she said that she really enjoyed it. It was fun having someone listen to her.

In addition to inviting a student to class, at our next class meeting, I showed a video tape recording made recently by the students in a small rural high school near the university. In the video are pictures of their school and the area around the school, and about six student interviews concerning their lives as students, how they feel about school and their hopes and dreams for the future. Again, the college students were introduced to various ways of listening and the kinds of things a good listener might learn about his/her students.

During this last summer, I also attended a workshop presented at Phi Dellta Kappa headquarters in Bloomington, Indiana on Howard Garner;s multiple intelligences theory. Carolyn Chapman, the teacher at the workshop introduced us to the theory of multiple intelligences, ie. that students learn in a variety of ways such as hearing, seeing, etc. And that there may be seven or more different kinds of intelligence: verbal/linguistic, musical rhythmic, logical/mathematical, bisual/spatial, bodily/kinesthetic, intrapersonal, and interpersonal. [7]

Ms. Chapman also divided the class into groups and required each group to make some kind of presentation concerning one of the intelligneces. As I remember, my group was supposed to do something relating to bodily / kinesthetic and so we pretended to be playing basketball.

I used a similar idea with my college class and each group presented a different intelligence in a variety of ways. Interestingly, the group that was supposed to be presenting the idea of verbal/linguistic intelligence, involved the class in a listening game. It'was fun but also a vivid way to learn the multiple intelligences theory.

As part of the class requirements set by the university, each student was required to do 14 hours of observing in local junior or senior high school class. Many times the students had particular assignments associated with their observations. For example, one week I asked them to record the rules of the class room; on another week they were to report on how a teacher handled discipline problems.

Each time the class met, we would go around the class room and all of the students would tell about what they had observed during the preceding week. Since there were seventeen students in the class and most of them visited different classrooms and saw different teachers in action, there were a great variety of experiences related. Some told of exciting, stimulating classes, others told of dry "boring" ones. They related how some teachers used current events and others used "Yellow paged notes". The fall 1996 presidential election provided some teachers and students with meaningful activities, but not all. One student told about watching a teacher deal with cheating on a test. Others saw teachers who lost self control and yelled at their students.

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[5] Student Responses, "Letter to the Teacher," September 16, 1996.

[6] Ibid.

[7] Carolyn Chapman and Lynn Freeman, Multiple Intellignecces Centers and Projects IRI / Skylight Training and Publising, Inc. Arlington Heights, Illionois, 1996. P. 5.

Student's comments included: "I really enjoyed listening to everybody's stories about observing. I picked up a lot of information and ideas by just listening to the other students' experiences". "I enjoyed hearing about the other students' experiences observing." " The sharing we do in the beginning was great." "I enjoyed hearing about everyones observation experiences and what they learned from it." "It is helpful and encouraging to hear that my fellow students are observing and experiencing the same things as I am in their observation. Everyone was very excited about being in the classroom." Not only were the students learning from their experiences but they were also practicing listening.[8]

One of the observation sessions consisted of students relating their experiences talking with individual students in the junior and senior high classes they were observing. Student teachers and high school students had talked about sports and hobbies they enjoyed. Some students opened up and talked about the problems in their lives: pregnancy, jail, boredom with school. Some of the high school students shared their dreams with the young students teachers - dreams of going on to college or of getting a good job. And the high school and junior high school students asked the student teachers questions such as "Why are you here"? Why do you want to be a teacher?".

As we continued in our weekly class meetings, we began to discuss the important matter of different types of questions teachers should use in their classes. We studied different kinds of questions: cognitive, convergent, divergent, and evaluative[9].

Then I asked the class to plan small lessons to be presented in class using a visual aid and asking the class the four different kinds of questions. They were graded on their plans and their presentation of their lessons which included listening and responding to the answers they received. The lessons were video taped and students passed the tapes around among members of the class so that they all had the opportunity to see and hear themselves.

Listening as a way of promoting good class attitudes and forestalling class troubles was also discussed.

Another way I worked to present listening as an important part of teaching was in modeling it in my own behavior. I came early to class and stayed after class so that students ho wanted to discuss their concerns with me had ample opportunity to do so. My class syllabus listed my office hours and students often dropped in to see my in my office.

The "Letter to the Teacher" also provided an important avenue for me to hear and respond to my students' concerns. A student wrote me, "I am very nervous about the practice involved in this class. I know I want to teach, but I am terrified of actually starting." A week later she wrote, "I feel a lot more calm & assured bout this course and continuing now... I feel a lot better now - must've been 1st week jitters!" Another student wrote about the day's class: "This served as a "reality check" to remind (us) of how close we are to teaching." In voicing his concerns about discipline another student wrote." The discipline sessions were interesting, especially being somewhat impromptu.

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[8] Student Responses, "Letter to the Teacher", September - December, 1996.

[9] James L. Barth, Methods of Instruction, Social Studies Education, Third Edition. University Press of America, Lanham, Mary Land. 1990. Pp, 111-121.

We'll see if what we practiced will really work ... considering the situation I'm going into next semester, all the discipline info will be helpful."[10]

As students wrote their comments about the class, I tried to listen and respond to their concerns. To the student who voiced his concern about discipline I replied, "All of the students in this class, either in student teaching or their first year of teaching will need to know as much as possible about discipline".

In another letter, a student commented, "It was very hard to try to come up with the lesson plan from scratch. It goes to show us all how we need to be prepared before we enter the classroom". I replied, "If the lesson taught you the need to be prepared before class and to make careful lesson plans, then you learned something really important."

Sometimes the student asked questions about something they were concerned about in the class. One student wrote me in the first weeks of class that he was unsure of where he would be observing. I did not want to assign particular students to particular classes, but I certainly wanted their observations to be successful. So, I visited the surrounding schools asking teacher if they were willing to be observed and then let a student teach for an hour. I also asked what time their classes met. I then put together a list of about 18 teachers who were willing to have observers and practice teachers in their classes. I typed out the list giving names, hours, type of class and schools. For many of the students who were unfamiliar with our local schools, I also unclouded directions. Then in class, the students looked over the list and chose the teacher they would like to observe. These choices were recorded and thus no teacher would be visited by a whole bunch of eager observers at the same hour.

Later in the semester, after the students had observed for 14 hours, they taught for an hour. I observed their first efforts. In may cases, their first classes went well. In a few, their first attempts were less successful. After each class session I would sit down with the student teacher and discuss their teaching experience. Hopefully, I modeled good listening practices.

As the semester drew to a close, I could look back on the first efforts of the students planning to be teachers. I could see the ways they had grown. They had learned more about planing, both for individual lessons and for a year. They had experience speaking before their peers and before a classroom of junior or senior high school students. They had practiced a variety of methods of teaching. And they had also learned about and practiced a very important part of teaching, the art of listening. I think they will be better teachers because of it.

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[10] Student Responses, "Letter to the Teacher," September December, 1996.

MULTICULTURAL EDUCATION:
AN INNOVATIVE APPROACH TO TEACHER EDUCATION

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I am, indeed, happy to be in attendance at the Forty-Third World Assembly of the International Council on Education for Teaching, and I am honored to have been invited to be one of the speakers for the Assembly, with the opportunity to share in the educational and professional dialogue pertaining to the very exciting, challenging, relevant, and timely theme, "Teacher Education and School Reform".

Teacher Education, in a global interdependent society, is our future greatest Challenge To produce the kind of teaching needed for the twenty-first century calls for a massive reform of the total educative process; and a radical reconstruction of teacher education if it is to meet the challenge and solve the complex problems imposed upon it by our diverse, complex, dynamic, progressive and interdependent world.

The restructuring of teacher education which I am proposing in this paper is based upon the broad concepts of multiculturalism, human rights global an intergroup up relations human rights global and intergroup relation, T The theoretical design will embrace a human rights-based multicultural curriculum with a marked global dimension, multicultural imperatives and democratic, pluralistic perspectives within a framework of cultural diversity to be reflected at all level, and in every aspect of the academic hierarchy.

The guidelines to be followed in the reform process will be based upon the following objectives:

1. To develop a sense of social responsibility and solidarity with less privileged groups

2. To lead to the observance of principles of equality in everyday conduct.

3. To foster the ability to communicate with others.

4. To develop a critical understanding of problems at the national and international level.

5. To encourage children to understand and explain facts, opinions and ideas

6. To encourage children to work in a group, accept and participate in free discussions, and to bas value judgments and decisions on rational analysis of relevant facts and factors.

7. To promote an increased international dimension and a global perspective in education at all levels and in all its forms.

8. To promote an increased understanding and respect for all peoples their cultures, Civilizations, Values and ways of life, including domestic ethnic cultures and cultures of the nations.

9. To promote an increased awareness of the increasing global ion between people and nations.

10. To promote an increased awareness, not only of the rights, but also of the duties incumbent upon individuals, social groups and nations towards each other. (United Nations Education, Scientific and Cultural Organization, 1974.)

Among American educators today, there is a growing consciousness that revolutionary action needs to be taken to make school experiences meaningful for students whose racial, social, religious, and cultural backgrounds differ from those of so-called mainstream students. This revolutionary action must be directed toward teacher training teachers needed for a culturally diverse society.

Educating teachers to perform successfully in a multicultural society is truly a professional to teacher educators. The implementation of a functional multicultural teacher education program is the most demanding obligation in teacher education. The imperative in teacher education is to help the prospective teachers to acquired the skills, competencies, and understandings they need to function as effective teachers of multicultural children. It is clear that prospective teachers must become aware of the cultural pluralism of American society. It is equally clear that public education must provide an opportunity for all pupils to prepare themselves to live effectively in such a society.

Teacher education personnel must face the fact that American teachers of today work within a multicultural society--a society ofmany diverse cultural groups. They must wholeheartedly accept the challenge and responsibility for preparing competent teachers for multicultural classrooms. To accept the challenge calls for a plan of action which would involve the designing of a multicultural teacher education program in terms of the realities of a democratic and culturally pluralistic society. This requires a teacher education program which will enable all prospective teachers to:

1. Understand their own and their pupils' environments and cultures.

2. Understand their own and their pupils' anxieties, insecurities, attitudes, and prejudices.

3. Develop teaching skills consistent with the accepted purposes of education for a multicultural society. (Christian Faltis, 1993)

A teacher education program has a social, moral and academic responsibility to train teachers for diverse ethnic groups.

Prospective teachers must become aware of the fact that the American society is characterized by cultural diversity and ethnicity; and that an emerging role of the school is to fulfill the growing demand for equity of opportunity and acceptance of all cultural groups.

Schools have not only been strongly urged to facilitate equality, desegregation and participation, but have required to serve as instruments for their realization. Yet polarization of diverse cultural groups within communities has intensified and our schools, in many instances, have become centers of confrontation. This volatile state of affairs uncovers the need for a multicultural approach to designing teacher education programs so as to equip prospective teachers with the proper knowledges and attitudes pertaining to:

1. The cultural heritage of ethnic groups.

2. The lifestyle of the culturally different and the relationship of that lifestyle to learning and adjusting into the large, society.

3. Human relation skills which are needed to cope with animosity that often exists among majority and minority groups in the larger society.

4. Compensatory education for the culturally deprived. (Donna Gollnick and Philip C. Chinn 1994)

The purpose of this presentation is to present a working model of how to develop a viable Multicultural Teacher Education Program. The specific objectives are: to provide Knowledge and techniques for developing and operating a functioning multicultural teacher education program; and to describe and encourage exemplary practice related to teacher education and multiculturalism. I am recommending multicultural education as the vehicle to be used reforming teacher education so that teachers may be maximally prepared to teach students of the 21st century who will be increasingly A multicultural pluralistic teacher education program is needed for a multicultural population.

The presentation relates to the general theme of the conference which focuses upon school reform in that it deals with a reform movement in teacher education. It specifically relates to the topic: "Enhancing Values in School Reform" as it concerns itself with multiculturalism and the development of democratic pedagogy for administering teacher education, with the ultimate goal of enhancing teaching and learning effectiveness to the degree that people will acquire those Knowledges, personal and social skills, values and attitudes that will help them function effectively in a society of diverse cultural groups.

The information being presented pertaining to multicultural education as an innovative approach to improving teacher education has been derived from many sources, namely:

1. A review of the philosophical and research literature in the area of multiculturalism;

2. A review of the literature in the area of improving teacher education programs.

3. The author's academic training in teacher education/higher teacher education and the area of multicultural education.

4. The author's philosophical writings and research efforts in the area of improving the quality of learning for teacher education students; upgrading teaching effectiv; and in the area of multiculturalism.

5. The author's active participation in local, regional, national, and international conferences focusing upon quality education and multicultural education.

6. The author's experiences as a teacher educator for forty-nine years -- serving in such robs as nursery school teacher, elementary school teacher, high school social studies teacher, and administrator in both public and private school settings, university professor in secondary education at the undergraduate and graduate

levels, college supervisor of student teaching, director of student teaching, coordinator of curriculum in the college of education, head of the department of secondary education for twenty years, and presently serving as full-time graduate professor in the area of multicultural education, secondary education, and curriculum and instruction at Florida A & M University.

Multicultural education, with its focus upon cultural diversity and cultural pluralism, has been defined in many different ways in an attempt to bring clarity to the meaning of the concept. A few of the most common and accepted definitions of multicultural education, cultural pluralism and cultural diversity are cited to describe the dimensions of the concept. The ones selected imply the essence of multicultural education as a perspective that focus upon:

1. The teaching of values which support cultural diversity (Amela C. Ownby and Heidi R. Perreault, 1994).

2. The encouragement of the qualitative expansion of existing ethnic cultures and their incorporation into the mainstream of socioeconomic and political life (Edwina B. Vold, 1995).

3. The support of explorations in alternative and **emerging lifestyles Alan Singer,** 1994).

4. The encouragement of multiculturalism, multilingualism and multidiaectisim (Michael Williams 1955).

5. Culture, race, sexuality and gender ethnicity, religion, socioeconomic status and exceptionalities in the educational process (James A. Banks, 1994)

6. The learners as individuals characterized by a unique combination of abilities and instructional needs which require the creation of instructional environments genuinely sensitive to many kinds of cultural diversity (Geneva Gay, 1993).

7. Strong emphasis on academic achievements as well as social and personal development (Pamela Tiedt and Iris Tiedt, 1 1995)

Leading theorists Cordell Wynn, Asa Hillard, Allen Sullivan, and William Hunter have described multicultural education as a multidisciplinary, educational process that provides multiple learning environments to match the academic, social, and linguistic Needs of multicultural learners on all levels of the academic hierarchy. Christine Bennett (1995) indicates that multicultural education is education all students simultaneously about multiple courses, in multiple cultures, and of diverse cultural background.

The (1994) Standards for Accreditation of Teacher Education issued by the National Council for Accredition of Teacher Education (NCATE) described multicultural education as a process by which individuals are helped to acquire those skills, attitudes, values, and knowledges that are needed to prepare for the social, economic, political, and educational realities experiences by member of a culturally diverse and complex society of many varied human encounters of local, national and international dimensions. James Banks (1994) defines multicultural education as an educational reform movement designed to restructure curricula and educational institutions so that students from diverse social-class, racial, and ethnic groups -- as well as both gender groups - will receive equal educational opportunities. Carl Grant (1995) believes that multicultural education represents our effort to simultaneously prepare students to function effectively in existing institutional structures; and to enable them to transform existing social and economic inequities while working toward a more just society. He describes this effort as quality education which provides a critical understanding of how society works and of how social values and priorities are defined through educational processes of:

1. educating students to distinguish between that from our diverse pasts that needs to be discarded and that which we can build upon; and

2. teaching them to draw upon their own cultural resources as a basis for engaging in the development of new skills, and to critically appropriate forms of knowledge that exist outside of their personal experiences.

Multicultural education is a multidisciplinary program that has the following as its goals:

1. Recognition of the strength and value of cultural diversity.

2. Development of human rights and respect for cultural diversity.

3. Legitimation of alternative life choices for people.

4. Equitable distribution of power among members of all ethnic groups (Christine E. Sleeter and Carl Grant, 1994).

Joan T. Timm suggests that multicultural education is a process by which people are assisted in developing their skills to function effectively in a society of diverse cultural groups, and that it focuses upon democracy as a practical guide to developing multicultural people; it is an educational reform process which promotes the understanding, appreciation and acceptance of the differences that exist among citizens of the world. Multicultural education is based upon democratic ideals, values, beliefs, attitudes and concepts which foster a wholesome respect for the intrinsic worth of every individual, and an ideal state of societal processes characterized by equity, equality of educational opportunity and mutual respect among existing cultural groups; thus the focus of multicultural education is on cultural perspectives associated with diverse ethnic groups and nations, and efforts are directed toward negotiate cultural diversity among nations as well as within a single nation (Frances Kendall, 1983).

Multicultural education refers to those curricular experiences which are designed to help individuals acquire those skills, attitudes, values, and know ledges that are consistent with the principles of cultural pluralism; function effectively in a society composed of many diverse cultural groups according to race, religion, language, nationality, sex, education, and socioeconomic status; which are designed to assist individuals in developing an understanding and respect for the cultures of other groups. It is an educative process based upon concepts which value cultural pluralism (Sleeter, 1993).

According to Young Pai (1992) cultural pluralism is an ideal that supports cultural diversity and seeks to establish a basis of unity so that there can exist a cohesive society whose culture is enriched by sharing widely divergent ethnic experiences. To endorse culture pluralism is to endorse the principle that there is no one model American (AACTE, 1994). According to Luis M. Hazard and Felipe c Stent (1987), _. Cultural Felipe C. Stent (1 987), cultural pluralism represents a state of equal co-existence in a mutually supportive relationship within the boundaries or framework of one nation of people of diverse cultures with significant different patterns of belief, behavior, color, and in many cases, with different languages.

Grant (1995) defines cultural diversity as an awareness, acceptance, and affirmation of cultural and ethnic differences, a way of thinking that promotes the appreciation of human differences and the belief that, in order for students to think critically, they must affirm both social diversity (cultural pluralism) and human diversity. The revised Accreditation Standards of the National Council for Accreditation of Teacher Education (NCATE, 1994) stated that "cultural diversity refers to the variety of cultural backgrounds of candidates, Faculty alto and school personnel based candidates faculty and school personnel based on ethnicity race, language religion socioeconomic status, gender, sexual orientation, regional/geographical background, and exceptionalities".

The interpretation of the above stated definitions implies, in a geway, that a multicultural teacher education program should consist of organized educational and professional curricular experiences designed to help prospective teachers to function effectively with pupils in a culturally diverse society. My working model of how to develop an effective multicultural teacher education program is based upon this concept of a multicultural teacher education program.

In current literature, several scholars have advanced well-conceived purposes of a multicultural teacher education program. Notable among these scholars are Kathryn A. Au (1993) who believes that a multicultural teacher education program should help prospective teachers to: employ cultural knowledge, cultural sensitivity and interpersonal skills when working with students; explore and develop expanded, or new ways of teaching; and provide opportunities for students to maximize their reaming potential. Sleeter (1993) suggests that a relevant multicultural teacher education program should focus upon helping the prospective teacher to: foster positive interpersonal relationships among members of diverse groups in e classroom and to strengthen each student's self-concept; teach the exceptional and culturally different, such as students of color, low-income students, and/or special education students; become knowledgeable about the history, culture, and contributions of the various ethnic and social groups in society, and the different populations they teach; acquire the skills, knowledge, and attitudes to do culturally responsive teaching in a pluralistic society composed of culturally diverse, complex and dynamic classrooms; and to help prospective teachers to permeate the principles of equity, equality, cultural pluralism and cultural diversity as they study and analyze social justice issues that cut across diverse groups, with the intent to bring about fundamental societal changes. Beverly E. Cross (1993) believes that teachers' values, beliefs, attitudes, and prejudices have an important influence upon their teaching, and she strongly advocates that a multicultural teacher education program should focus upon helping prospective teachers to improve race relations. Frank Siccone (1995) suggests that multicultural education programs should help prospective teachers to become more sensitive to culture and learning styles out of a basic respect for students, for their reality, and for their tremendous potential for reaming. He believes that a unique pedagogical style is often needed to deal effectively with cognitive or learning styles of pupils thus he, along with Herbert Grossman (1995) argues for culturally relevant pedagogy.

Banks (1994) cites several goal of a multicultural education program which support and reflect the kind of purposes listed above for a multicultural teacher education program. The are intellectual development, preparation for a vocation, acceptance of and respect for diversity; with .diversity with equity appreciation for fine arts and development of respect for self and others through national and global awareness.
These purposes suggest that prospective teachers must understand their students physical, social, mental, and emotional characteristics; their students' cultures and learning styles, and they must learn how to plan and implement a curriculum which reflects the cultural diversity of all students.

Several current authors focus upon adding an international dimension to the teacher education curriculum (Sonia Nieto,1992;; Ned H. Seelve 1993; Kenneth Cushner 1996). They believe that the rapid growth of ethnic diversity in the United States and global interrelatedness provide a mandate for global education; and that teacher education institutions must help prepare students for the inevitability of global interdependence and for living in a world characterized by ethnic and cultural diversity.

Teacher training programs must prepare the prospective teacher to design and implement, with the cooperation of multicultural populations, a multicultural curriculum which will enable learners in a culturally diverge society to cope with the persistent life situations facing them in an interdependent world (James Lynch, 1989). Therefore, competencies and understandings needed by multiethnic pupils as they attempt to deal with the basic problems and situations of everyday living should constitute the core of a curriculum designed to train teachers to function effectively in today's dynamic and complex society of disparate cultures; Banks (1987) believes that if teacher education programs are to prepare pre- in-service in-service to function function within multicultural classrooms, they must help teachers acquire:

1. More democratic attitudes and values;
2. A clarified philosophical position related to pluralism;
3. A process of conceptualization of ethnic studies;
4. The ability to view society from diverse ethnic perspectives; and
5. Knowledge of the emerging stages of ethnicity and their curricular and teaching implications.

Hillard (1974) emphasizes that the teaching process is always a cross-cultural encounter so that the primary objective of a multicultural teacher education program should be to train prospective teachers how to plan for, and carry out the processes of "culture context teaching". He stresses the fact that teachers are obligated to modify their instructional styles to be more compatible with the culture and learning styles of different ethnic groups. He provides recommendations for the preparation of teachers who can function successfully in a culturally heterogeneous environment. He lists the following understandings, skills and attitudes as essential for teacher effectiveness:

Essential Understandings

1. The teaching process is always a cross-cultural encounter.
2. The personality, values, and social background of the teacher are critical cultural inputs.
3. All teaching tools are culture bound.

4. The classroom is not a benign context, but a potent matrix.
5. Teachers must understand how the student can be a victim.
6. Teachers must understand that all minds are equally complex
7. Teachers must be helped to understand that the poor and racial or ethnic minorities can and actually have been able to learn at the same level as others when the proper environmental support was provided.
8. Teachers must understand that reaming is related to a sense of power over some of the forces which infringe upon our lives.
9. Teachers must understand how their own expectations are determining factors in building a climate for growth of students.
10. Teachers must intimately understand the culture of their students.

Essential Skills:

1. The ability to communicate with students from other cultures.
2. Diagnosing the knowledge and abilities of students from other cultures.
3. Skill in the evaluation of professional literature bearing upon multicultural problems.
4. Self-diagnosis.
5. Recognizing cultural equivalencies.
6. Detecting conscious and unconscious negative signals.

Essential Attitudes:

1. Teachers must be as free of bias as possible and must be open to continuing self-examination

2. Teachers must honor and value cultural alternatives such as language, beliefs, values and behaviors.

3. Teachers must feel that a multicultural orientation is beneficial to them personally.

To help the teacher to function effectively in ethnically pluralistic classrooms, (1974) believes that a teacher education program should be planned around competency clusters which would prepare all teachers to develop certain basic competencies in the areas of:

1. Understanding human growth and development;
2. Planning and preparing for instruction;
3. Performing instructional functions;
4. Performing assessment functions;
5. Displaying pupil achievement;
6. Relating interpersonally;
7. Carrying out non-professional responsibilities.

These competency clusters are broken down into competencies to be demonstrated by ale teachers in a culturally diverse society, and competencies to be demonstrated by teachers who teach culturally different children and youth. Wynn's focus upcompetency areas in programs for training teachers to function in a culturally diverse society, and his emphasis upon competencies to be demonstrated by teachers of culturally different children and youth support the introduction of competency-base education as a viable strategy for fulfilling the goals of a multicultural teacher education program.

The recommendations of Banks (1981), Hilliard (1974), and Wynn (1974) seem to suggest a comprehensive listing of competencies essential to the preparation of effective teachers for a multicultural society. Implementation of a program to accommodate these competencies will require significant changes in the academic contort and experiences provided for prospective teachers. These changes will affect all facets of the college program and will require the cooperation of a large segment of the academic community. Anything less than a concentrated, committed and cooperative effort will result in mere academic tinkering with an outmoded and ineffective teacher education program.

An effective multicultural education program is needed for American youth. This goal is only possible through the creation of a viable multicultural teacher education program responsible for producing teachers who can put into practice the philosophy of cultural pluralism and utilize culturally derived teaching competencies in a personalized process of teaching and reaming (Duane Campbell, 1996). A teacher education program which focuses upon preparing teachers for multicultural classrooms should be designed immediately. Gay (1995) believes that preparing teachers to work better with culturally different students and communities demands action now and that conventional approaches to teacher education must be decentered and transformed at their most fundamental core if teachers are to be prepared to educate for diversity students of the 21 1st century who will be increasingly racially, culturally, ethnically, socially, and linguistically pluralistic.

The definitions, purposes, and characteristics of multicultural education cited in current literature suggest that the curricular components of a multicultural teacher education program should equip prospective with the following understandings:

1. Multicultural children and youth represent one of the resources of our nation but their full potential will be realized only through a curricular design structured to meet their needs in today's world.

2. Multicultural children and youth should be involved in curricular experiences in which each individual will have the opportunity to capitalize upon his/her potentialities.

3. Multicultural children and youth should be guided and developed to the extent that they can make a maximum contribution to society's well being.

4. Multicultural children and youth should be involved in a curriculum which focus upon the basic problems and situations of everyday living confronting them in a democracy.

5. Multicultural children and youth have special concerns, and they must be looked at in the light of needed growth in dealing with the range of persistent life situations in America's pluralistic society.

6. Multicultural children and youth experience maximum growth toward democratic values and ways of behaving only when the dominant agencies directing their activities--home, school, church, community-coordinate their efforts, and each operates upon the basic guidelines governing democratic living.

7. Multicultural children and youth learn from everything to which they respond; therefore, their total curriculum must be conceived as all the situations with which they must deal.

8. Multicultural children and youth need personalized instruction; it is essential in providing reaming experiences which will be meaningful for culturally and linguistically different children.

9. Multicultural children and youth need to be taught to be tolerant.

10. Multicultural children and youth need to be helped to understand the causes of prejudice.

11. Multicultural children and youth need to learn how to get along with others.

12. Multicultural children and youth should learn to handle new situations in ways that are consistent with social reality.

13. Multicultural children and youth should be taught to learn, by thoughtful appraisal, the contributions and privileges of all members of the community.

These understandings do indicate the broad concepts of teacher competencies that are necessary for teachers of multiethnic learners as they attempt to realize the goals of a truly multicultural education program. Some of the concepts are cited below:

1. Teachers of multicultural schools must understand ethnic learners as the individuals they are, each with his/her potentialities and rate of growth, and each with his/her own background, problems, habits, and curiosities. If the important democratic value of respect for personality is realized among multiethnic children and youth, the curriculum must reflect these differences among learners. A teacher must be able to promote a maximum of personality integration and happiness for their pupils as well as the greatest gain in academic achievement. Therefore, it is essential that pre-service and in-service educational experiences help prospective teachers to develop "well - integrated" personalities so that they can do everything possible e to promote an optical state for each ethnic pupil. Curricular experiences should be designed which would help the prospective teacher to:

a. a understand and apply relevant theory pertaining to human growth and development and development in the educative process.

b. gain a functional understanding of self in terms of his/her physical, emotional, social, and mental characteristics, needs, problems, and developmental tasks.

c. gain a functional knowledge of the general and unique characteristics, needs, problems, and developmental tasks of racial and ethnic groups in America.

d. acquire a positive self-concept, and to help multiethnic learners to do the same.

e. develop self-confidence, and to help multiethnic learners to do the same.

f. gain a functional understanding of his/her culture and the cultures of he multicultural learners and how their cultural roles are determined and acted out in terms of the personal and social dynamics of the teaching-learning environment.

g. realize that the multiethnic student comes to school with a personality, a set of aims, values, social habits and attitudes which are the product of his sub culture experiences. Therefore, individualized instruction, student-centered methodology and "cultural context' teaching must be employed in the educative process. The multiethnic student is a unitary, integrating who is seeking to maintain equilibrium; a goal-seeking organism, pursuing purpose in order to satisfy needs; an active, behaving, exploratory individual with a pattern and rhythm of growth peculiar to his/her individuality; a learner whose education process must provide freedom to explore, to construct, to question, to differ, to make mistakes, and to develop creative contributions within the limits of freedom of democratic controls, right of others, and good taste. This bang true - -then, it is essential that teachers be taught to recognize that in a multicultural classroom widely different, varied type of l learning experiences should be provided, adaptable to levels of maturity, and to different rates, interests and abilities. If a "well-integrated" personality is sought for in educating and humanizing pupils, a teacher of multicultural children must attempt to promote adjustment patterns that are satisfying to each student; that are flexible to changing needs and social conditions; and that are approved by the members of the many sub-groups in which the pupils must function.

2. The responsibility of a multicultural teacher education program to help the prospective teacher to develop an understanding and respect for the cultures of other diverse groups is a complex and demanding task. The individuality of the learner must be taken into account. The experiences must possess maximum life-likeness for the multiethnic lea, and must be socially desirable. Multicultural teacher education experiences should focus upon concepts, meaning, value patterns, attitudes, habits, and cultural backgrounds which are familiar to all racial groups and classes. Students should not be handicapped in terms of experiential and conceptional backgrounds.

3. It is absolutely important for teachers of multicultural schools to acquire those Knowledges, skills, and attitudes which will facilitate growth in the ability to act in intergroup relations. The educational process is essentially an attempt to facilitate the socialization of the individual. The socialization process is based upon social interaction which rests upon good human relations and effective intergroup relations. Therefore, the educative setting for multicultural children should provide many varied opportunities to work in the "we" relationship, developing, eventually into self-directed groups activity. The whole range of interactive human relation ships, the cooperative group process, is essential to the development of mature socialized multicultural personalities. Teachers of multicultural populations must be trained to plan and direct a humanistic and cooperative socialization. process.

4. It is important for a multicultural teacher education program to design curricular experiences which will help the prospective teacher to cope with the language problems which bilingual children experience. Many school districts have large numbers of parents who speak only a foreign language and their children grow up in a bilingual environment. In fact, large groups of pupils, in this culturally diverse

society, are literally foreign speaking. Prospective teachers must be taught not to penalize them for being foreign language speakers, rather they should be taught how to capitalize on their heritage. Teachers must also be taught that because their language is different, it does not necessarily mean that their language is deficient Prospective teacher should also be required to become familiar with the language used by the ethnic groups they will encounter.

5 A multicultural education program should involve prospective teach" in varied curricular experiences to equip them with the knowledge, skills and attitudes necessary for identifying multiethnic children with persistent feelings of inferiority. Unfortunately, inferiority feelings, which are so great as to threaten the security of the child, are often encountered in a multicultural classroom. The prospective teacher must also engage in curricular experiences which would equip them with the appropriate strategies for deeding with the minority children's socially undesirable reactions to persistent feelings of inferiority. They must become familiar with specific techniques for dealing with such behavior as timidity, bullying, awkwardness, delinquency, envy, domineering behavior, day-dreaming, perfectionism, self-effacement annoying attention getting devices, fear of attempting new activities, and pretended ill health. They must become aware of the facts that minority children will not exhibit any of these behavior traits consistently; and that often the discovery of activities in which they can achieve merit, praise, and win recognition is likely to alleviate them markedly.

An effective multicultural teacher education program based upon the aforementioned concepts and competencies should enable prospective teachers to perform the following specific professional tasks as they attempt to help multicultural reamers live in a global society characterized by cultural pluralism and cultural change:

1 A teacher involved in a multicultural classroom should be able to develop an understanding of the cultures of his/her pupils so that they can capitalize on its strengths and avoid competing against its mores and ideals. This requires:
   a) an understanding of the origin and history of basic characteristic and lifestyles of the various social, ethnic and racial groups in America.
   b) an understanding of the current philosophies, values and attitudes of the ethnic and racial groups in America.
   c) a functional understanding of the specific customs and traditions of the racial and ethnic groups within the multicultural classrooms and the community at large.
   d) an understanding of the characteristics of the sub-cultures in the various ethnic groups.
   e) an understanding of the characteristics of the American culture and its relationship to its sub-cultures.

2. A teacher must be able to identify, select and use a wide variety of instructional resources which are appropriate for the cultural groups involved, in terms of interest, levels of complexity, students' maturity and experience, and in accord with individual differences within the group. Multiethnic students represent widely different capacities, abilities, and interests which cannot be satisfied through uniform methodology.

3. A teacher must be able to identify, select and utilize modern technological resources to promote the fulfillment of the many and varied needs of multiethnic learners.
4. A teacher must be able to conceptualize the impact of varied home, community, and social forces upon the behavior of the multiethnic student and to plan for community involvement. This involvement requires that the teacher acquires techniques for understanding family and community patterns of social relationships among racial and ethnic groups. It is essential for families of multiethnic children and youth to be involved in the planning and execution of meaningful multicultural experiences.
5. A teacher should be able to make a critical appraisal of the socia' institutions of groups; and to determine the extent to which he/she can assist with solving problems of segregation discrimination, prejudice and hostility.
6. A teacher should acquire cognitive, affective and psychomotor knowledges and skills which will help him/her to recognize the fallacy concerning intellectual inferiority or superiority of a racial or ethnic group overcome cultural and racial stereotypes; and to facilitate the solving of problems arising from cultural diversity.
7. A teacher must understand how to design and implement bilingual, cross-cultural programs. He/she must be able to select and use appropriate instruments of communication with individuals and groups. It is imperative for the teacher to understand the language variances of multiethnic reamers.
8. A teacher must be able to make systematic studies of ethnic learners to discover their differences and similarities. From this information should emerge a flexible curriculum geared to the needs and potentialities of individuals. Many of America's significant achievements come from a wealth of diversity in capacity, interest and viewpoint. The following cited knowledges, skills and attitudes are needed by teachers if they are to make functional studies of ethnic learners:

a) a Understand and apply factual information to validate attitudes and beliefs about ethnic groups.
b) Appraise many sources of information concerning ethnic groups.
c) Make critical interpretations of sources of information concerning ethnic groups.
d) Make intelligent use of appropriate sources of information about ethnic groups.
e) Understand, interpret and appropriately apply in, the socialization process, information about the mores and folkways of ethnic groups.
f) Accept the fact that racial and ethnic groups express the same values, attitudes and appreciations through different behavior patterns.
g) Relate with ethnic group with proper regard for basic factors and principles which govern their lives.
h) Understand the privileges, responsibilities and restrictions which govern the behavior of ethnic groups.
i) Identify similarities and differences in standards of living and patterns of work of families of racial and ethnic groups.
j) Relate, in a positive manner, with members of the various social and ethnic groups.
k) Acquire simple techniques for effective intergroup cooperation.

When immediate and continuing life situations become the bases for the Selection and organization of instructional objectives, content, teaching-learning experience, methodology and evaluative techniques; the identification of tasks to be performed by multicultural populations, the following participles should direct the teacher's efforts in fulfilling the goals of general education.

Professional education and the area of specialization in a viable teacher education program:

1. Learning should be an active process; it is doing, reacting, undergoing.
2. Learning should be a unitary process.
3. Learning should be a meaningful process.
4. Learning should be a direct experience as much as possible.
5. Learning should be a concrete experience as much as possible
6. Learning should be a goal-setting activity.
7. Learning should be functional as well as abstract.
8. Learning should relate the students' purposes and problems of continuing life situations.
9. Learning under intrinsic motivation is preferable to learning under extrinsic motivation.
10. Learning purposes and goals should be geared to the interests, needs and maturities of the learners.
11. Learning will be more nearly adequate if the situations in which it is learned is similar to those situations in which it may be used.

The information cited in this article pertaining to the competencies needed by teachers in multicultural classrooms, and the kinds of teacher education curricular experiences needed to develop these competencies in prospective teachers, is in agreement with F. H.

Klassen and D. M. Gollnick's (1980) components of effective multicultural teacher education programs. Their components deal with helping the prospective teacher to become:

1. practitioners of positive human relations;
2. familiar with the cultures, lifestyles, and contributions of all racial and ethnic groups; and
3. functionally intelligent about the issues and problems of racism, prejudice, and discrimination, and the influence these forces have on the lifestyle of cultural groups.

Based upon the information presented in this paper pertaining to multicultural education: nature, purposes, characteristics, components, principles, major concepts, competencies and guidelines for the implementation of an effective multicultural education program for elementary and secondary schools; and for the creation of an effective multicultural teacher education program I would, now, like to suggest a theoretical structure for the designing and implementing of a viable multicultural teacher education program. The first step to be followed in the developing of the structure is to create a conceptual framework. Multicultural teacher education is best implemented through a conceptual framework designed according to multicultural imperatives, and shared among members of the professional community. The framework should include the mission statement and values which support it, and the professional commitments of teacher education personnel; philosophy and purposes; assessment statements of desired results for prospective teachers; an associated rational for course work, field experiences, and program evaluation; and it should reflect multicultural imperatives and global perspectives throughout the entire program. The framework should be based upon a knowledge base which rests on established and contemporary research, the wisdom of practice, and emerging and current education policies and practices.

The second step to be followed in designing a multicultural teacher education program is the dividing of the conceptual framework into four major curricular components with detailed multicultural descriptors and imperatives. The components are as follows:

Genera Education

The general education aspect of a teacher education program represents courses and other learning experiences in the liberal arts and sciences that prospective teachers take for the purposes of becoming liberally educated. General studies courses an/or experiences in the arts, communications, history, literature, mathematics, philosophy, sciences and the social sciences are essential as they help the prospective teacher to develop theoretical and practical knowledge with multicultural and global perspectives.

The basic purpose of a general education program is to provide students with a broad understanding of man's cultural heritage. It would tend to provide the framework for a realistic understanding of a cultural diverse society. Such a purpose, it effectively implemented, is consistent with the requirements for competent teachers in multicultural classrooms. A general education curriculum is usually designed to provide broadening experiences in communication skills, science, social sciences, and the humanities. These experiences provide opportunities for students to develop an understanding and appreciation of contemporary civilization. General education tends to broaden prospective teachers' understanding of their role as citizens in a pluralistic democratic society and as teachers of multicultural children and youth. It is through general education experiences that prospective teachers acquire those traits, attitudes, values, and knowledges which will help them develop an appreciation of people who are different culturally, socially, religiously, educationally, economically and politically. This appreciation should result in prospective teachers being willing to accord the culturally different full equality of opportunity.

The general education experiences of prospective teachers should help them to communicate their thoughts orally, and in writing with enough clarity and logic to be understood by all racial and ethnic groups; develop knowledge and skill in the use of the languages of multicultural children and youth; and the general education experiences should help them to recognize language as a special dimension in the education of the culturally and linguistically different, and to consider language differences as representing basic means of communication.

A teacher education program which focuses upon preparing teachers for multicultural classrooms should design general educational experiences which will enable prospective teachers to acquire those personality traits that are conducive to establishing effective human relations with all racial and ethnic groups; identify immediate and continuing life situations of multicultural pupils; and to select, and to organize content and activities which will enable multicultural learners to deal critically and creatively with the immediate and continuing life situations.

The general education component of a teacher education program should provide for professional laboratory experiences which will bring the prospective teachers into many and varied contacts with multiethnic students so that they may acquire the knowledges, attitudes, and skills necessary for understanding their characteristics, needs, problems, interests, and developmental tasks. It should also involve the prospective teachers in informal and formal activities with diverse ethnic and racial groups in order to understand multicultural people: their cultures and lifestyles, and the contributions they have made, and are making toward world civilization, American civilization, to the local setting.

Specialization

The area of specialization in a teacher education program provides intensive study in the content fields in which prospective teachers hope to teach in the elementary and secondary schools. It provides the teacher with important instructional content. It is in this area that prospective teachers complete a sequence of courses and/or experiences to develop an understanding of the structure, Skills, core concepts, ideas, values, facts, methods of Inquiry, and uses of technology for the content they plan to teach. It ensures that teacher candidates attain academic competence in specified instructional content. This content will and should, in some cases, reinforce professional education and the foundational studies of general education. Specialization in social studies and language arts are obvious areas where intense study will provide a deeper understanding of other cultures and the contributions to civilization mad by their members. Similar benefits can be derived from other areas of specialization. For example, a prospective teacher of multiethnic classes in music, art and foreign languages has an obligation to become familiar with the contributions of various cultures and ethnic groups. Although the physical sciences, mathematics and other disciplines may not deal directly with multicultural content to a significant extent, a prospective teacher must be familiar with contributions of ethnic minorities to the advancement of knowledge in these fields.

Professional Education

The professional sequence is made up of those elements which are concerned with the theory and practice of the teaching learning process. Since teachers are measured by their ability to practice their profession successfully, they must have control of the knowledge and principles upon which their practice is based. Adequate control of knowledge and principles is developed in prospective teachers through planned experiences under capable guidance and direction. Prospective teachers learn to plan and direct an effective teaching-learning process for multicultural children and youth.

It is through the professional sequences of theory courses and multicultural professional laboratory experiences that prospective teaches will be trained to use those teaching strategies which are culturally and linguistically appropriate for multicultural children and youth; create and utilize instructional resources which are meaningful to the identified culturally different child in building a positive self concept; formulate meaningful instructional objectives for multicultural children and youth; plan specific activities which will help them multiethnic child to achieve the designed cognitive, psycho-motor and affective objective; identify and utilize appropriate evaluative devices; and they will be trained to apply the principles of human growth and development, psychology, democracy, and curriculum to creating a humanistic educative process to help multiethnic children and youth achieve personal and social adjustment in this dynamic, complex, and pluralistic democratic society.

The professional component of the teacher education program must prepare the prospective teachers to design and implement, with the cooperation of multicultural populations, a culturally pluralistic curriculum which will enable learners in a culturally diverse society to cope with the persistent life situations facing them. Therefore, competencies and understandings needed by multiethnic children and youth, as they attempt to deal with the basic problems and situations of everyday living, should constitute the core of the professional sequence in a teacher education program designed to help teachers function effectively in today's society of disparate cultures.

Professional Laboratory Experiences

"Professional laboratory experiences are all those contacts with children, youth, and adults in school and community that make a direct contribution to the understanding of basic concepts and principles as well as individuals and their guidance in the teaching learning process" (John G. Flowers, 1948, p. 7). It is through a planned program of laboratory experiences that prospective teachers will have opportunities to perform the major tasks of teaching under the direction and supervision of master teachers.

Professional laboratory experiences represent the core of a program for the preparation of teachers. They integrate educational theory and practice into a meaningful and active relationship, and they promote the development of a professional skill through systematic and continuous practice under the direction of qualified public school and college personnel. The provision for direct experience gives meaning to ideas, theory, and action. "Direct experiences refers to the actual living through a situation or event. It implies direct association with and participation in an on-going activity" (Donald P. Cottress, 1956 - Stratemeyer, p. 67). This characteristic has resulted in the identification of professional laboratory experiences as a major instructional procedure in teacher education.

Since the focus of a truly multicultural teacher education program is on the development of essential teaching competencies to be demonstrated, it is expected that teacher education personnel will place high priority upon an immediate restructuring of that aspect of the teacher education program which concerns itself with direct experience and practice--professional laboratory experiences. Laboratory situations provide excellent opportunities for prospective teachers to have a variety of meaningful multicultural education experiences.

Professional laboratory experiences provide for a clinical study of teaching. Theoretical understandings are practice, tested, and refined. These realistic professional experiences provide relevance and challenge in teacher education as they bring about the fusion of educational theory and practice. As the prospective teacher becomes involved in a program of flexible, individualized, meaningful, and practical professional experiences, he/she will gradually assume responsibility for teaching.

Multicultural professional laboratory experiences in teacher education represent a program of direct experiences in which prospective teachers will have contact with children and youth in a culturally pluralistic laboratory, setting accurately representing the diverse society of America. A functional multicultural professional laboratory program provides an ideal opportunity for prospective teachers to have real and active experiences with multicultural populations.

Effective teaching is the goal of teacher education. A program of multicultural professional laboratory, experiences is the major avenue through which prospective teachers may acquire those Knowlwdges, skills, and attitudes which increase teaching effectiveness in today's pluralistic society. In this program, they interact with and observe multiethnic groups of teachers and students function in the educative process of a culturally diverse society; observe and put educational theory into practice; develop instructional skill, and a functional understanding of principles of education upon which practice should be based; and they acquire the fundamental skills needed for effective interaction, communication, and personal and social adjustment in a humanistic society composed of many unique cultural groups.

Thus, the immediate challenge should be designed a multicultural professional laboratory program wherein prospective teachers will have real and active experiences with multicultural populations. This will involve assisting prospective teachers in developing competencies needed to function as effective teachers of multicultural children, and helping prospective teachers to assist children and youth to function within their ethnic culture, the mainstream culture, and with other ethnic cultures. Essential multicultural professional laboratory, experiences should focus upon providing a laboratory sating for prospective teachers that will contribute to understanding: (1) multicultural children and youth: their characteristics, needs, problems, developmental tasks and life-styles; (2) environments and cultures of multicultural children and youth; (3) languages of multicultural children and youth; (4) personalities of multicultural learners: attitudes, values, aspirations, self-concepts, convictions, insecurities, abilities, competencies, knowledges and prejudices; (5) purposes of a multicultural educative process; (6) instructional procedures consistent with the accepted purposes of education for a multicultural society; (7) the concepts that America is a culturally diverse society, and that cultural pluralism is a basic reality in the American classroom.

Multicultural professional laboratory experiences should be an integral part of a teacher education program. They should occur continuously throughout the entire teacher education curriculum in the areas of general education, professionaeducation, and in the area of specialization. The components, activities, methodology, instructional resources utilized should, at times, reflect multiculturalism .

It is quite clear that the most important professional laboratory experiences within a teacher education program are those associate with student. teaching. A very valuable phase in the pre-service education of all teachers is their student-teaching experience. Research related to the effectiveness of teacher education experiences places student teaching at the top of the list of the most important aspects of a broad program of professional laboratory experiences.

The primary purpose of student teaching is to involve the prospective teachers in experiences in which they will be called upon to perform tasks of teaching similar to those in an actual teaching situation. These educational experiences occur in the observational phase, participatory phase, and the actual teaching phase of the student teaching experience. All three phases represent excellent opportunities to help prospective teachers understand multicultural education, multicultural children and youth, and multicultural environments; acquire essential multicultural knowledges, attitudes, and skills; and to help them acquire social and emotional qualities needed for effective teaching in multicultural classroom. Therefore, through a truly sound and functional student teaching program in today's public school, the primary goals of a multicultural teacher education program are realized, and thus, the goals of multicultural education which are focused upon the personal and social adjustment goals of multiethnic learners.

The third step in designing a multicultural teacher education program pertains to constructing a detailed and specific outline of the kinds of courses, themes, activities, and methodologies, instructional resources and evaluative techniques which should be utilized in fulfilling the stated objectives. Examples of desired content and major activities are listed below:

I. Content
    A. Multicultural Education
    1. Definition
    2. Purposes
    3. Importance
    4. Characteristics
    5. Concepts
    6. Principles
    7. Components

8. Terminology
  a Multiculturalism
  b. Multicultural Education
  c. Multiethnic
  d. Ethnic Studies
  e. Culture
  f. Cultural Pluralism
  g. Cultural Diversity
  h. Minority groups
  i. Bilingual
  j. Ethnic Groups
  l. Bicultural
  i. Bilingual
  n. Acculturation
  o. Macroculture
  p. Racism
  q. Prejudice
  r. Segregation
  s. Discrimination
  t. Accommodation
  u. Stereotype
  v. Democracy
  w. Curriculum
  x. Education
  y. Global Education

B. Minority Groups
  1. Origin and development
  2. Culture and lifestyle
  3. Dominant characteristics
  4. Language
  5. Insidious myths
  6. Social stratification
  7. Problems and their important impact on lifestyle
    a. Hostility
    b. Prejudice
    c. Discrimination
    d. Segregation

  8. Contributions

C. Minority Learner
  1. Characteristics
    a) Physical
    b) Mental
    c) Social
    d) Emotional
2. Unique values, aspirations, expectations
3. Problems
4. Learning styles
D. Human Relations
  1. Classroom dynamics
  2. Communication skills
  3. Cross-cultural interactional skills
  4. Personal awareness

E. Community Analysis and involvement
  1. Structure of community culture
  2. Functions and relationship of existing social institutions
  3. Impact of social institutions on learning styles
  4. Appropriate utilization of community resources

F. Processes of Teaching

a) Formulating a set of meaningful objectives for culturally diverse students
b) (cognitive, affective, and psychomotor).
c) Utilizing motivational techniques and incentives which appeal to the interests,
d) values, and aspirations of culturally different youth.
e) Identifying and selecting multicultural contort which is linguistically appropriate.
f) Identifying and selecting instructional procedures and specific strategies for teaching ethnic students, which are culturally and linguistically appropriate.
g) Identifying and utilizing appropriate multicultural resources (human, cultural, physical).
h) Designing meaningful curricular activities or student living in a multicultural society.
i) Utilizing appropriate evaluative techniques which take into consideration the leaning styles, values, expectations, aspirations and orientations of multiethnic students.
j) Understanding linguistic characteristics of the target languages.

G. Culture Context Teaching
Methodology which reflects cultural diversity

1. Content which is multicultural in nature and specifically related to target groups.
2. Procedures and activities which reflect ethnic cultures.
3. Principles and techniques for designing a laboratory setting in which there are
4. many varied opportunities to:
   a) a Have direct content with diverse groups
   b) Examine one's own racial and ethnic feelings and prejudices
   c) c Explore and observe concepts of cultural pluralism
   d) Translate theories of cultural pluralism in action
   e) Participate in structured group experiences which will promote self-identity and acceptance of differences existing among diverse groups.

II. Major

a. Make a thorough study of the origin, development, culture, lifestyle, and contributions of ethnic groups.
b. Observe the community life of the ethnic cultures involved.
c. Participate in the community life of the ethnic cultures involved.
d. Become directly involved with community organizations concerned with promoting he human relations.
e. Become involved in structured group sessions which focus upon meaningful interaction with persons of different cultures.
f. Become involved with community and school efforts to combat racism, prejudice, and discrimination.
g. Conduct community and school studies to analyze the impact of problems arising from culture pluralism and cultural diversity.
h. Identify current biases in public school curriculum in terms of objectives, methodology, instructional resources, and evaluation procedures.
i. Become familiar with the language of the target cultures.
j. Outline competencies needed to teach in a multicultural society.
k. Outline competencies needed by teachers who teach culturally different youth.

1. Design a curriculum for a bilingual/bicultural high school in which you use multiethnic criteria.

The outline of multicultural content and activities emphasizes a multicultural laboratory setting for teacher education which (Grant, 1975) believes is conducive to exciting possibilities for incorporating practices that address children and youth of diverse social and cultural backgrounds. The outline also allows for many of the radical changes suggested by (James C. Stone and Donald DeNevi, 1971) in terms of bringing into the schools new instructors, novel community-based instructional resources, new facilities, new content and new methods which will increase the authenticity of the school's coverage of ethnic cultures. The outline is in accord with the writings of Grant Clothier (1972), another writer who has repeatedly indicated that the preparation of well-trained, effective and committed multicultural teachers will depend upon broad scale curriculum changes based upon a reexamination of educational purposes.

The fourth and last step in setting up a multicultural teacher education program involves the recruiting of capable administrators. staff, faculties, and students from culturally, ethnically, and racially, diverse backgrounds.

In conclusion, let me reiterate the major aspects of teacher education, which I believe demand our immediate attention as we strive to make teacher education more relevant. There must be a total commitment by teacher education personnel to developing and implementing a curriculum pervaded by global dimension, humanism, pluralism, and cultural diversity. There must be an organized, continuous program developed for personnel and institutional staff development. Teachers must learn to think multiculturally and become skilled in organizing learning experiences that reflect diversity and uphold equality. Teachers must translate cultural knowledge into cultural . Teaches must be able to utilize culturally relevant pedagogy. Culture context teaching is a "must".

We must accept the challenge to construct a multicultural teacher education program which will equip prospective teachers with the ability to teach all youth according to their needs and interests within the framework of multicultural imperatives and perspectives.

The strength and survival of a country is inextricably tied to the quality of public schools and their effectiveness in the education of all students.

A multicultural society requires a multicultural educative process. Elementary and secondary schools must help multiethnic children and youth from all cultural and racial groups to acquire an understanding, appreciation, and respect for others and their cultures; and to transform democratic theory into practice--everyday democratic living. The writer firmly believes that an innovative multicultural teacher education program will help to prepare the kind of teacher needed for the dynamic, complex multicultural classrooms at the elementary and secondary school levels.

A review of the literature in the area of multicultural education revealed that far too little attention is given to programs for the preparation of competent, committed teachers who will be capable of entering a multicultural classroom. The research clearly points to the importance of teacher education personnel in establishing a truly multicultural setting; and it also indicates a need for training programs to ensure the preparation of personnel who can function effectively in a culturally diverse society.

The implementation of a functional multicultural teacher education program is the most challenging and demanding obligation in teacher education. The imperative in teacher education is to help the prospective teacher acquire the skills, competencies, and understandings they need to function as effective teachers of multicultural children.

Hopefully, this article has portrayed the philosophy that multicultural education is not a catchword for "minority" but encompasses all people of the United States, the people of the world, their racial and ethnic differences, their customs, their levels of income, their traditions and beliefs, their languages; their religious beliefs; and that educational institutions must begin to assume responsibility to see that teacher education programs reflect cultural and ethnic pluralism through their staffing, objectives, content, methods, teaching-learning activities, resources, evaluative devices, and participatory models and practices.

References

American Association of Colleges for Teacher Education, "No One Model American", Washington, D.C., 1973, unpaginated flyer.

Au, Kathryn, H., Literacy Instruction in Multicultural Settings, Harcourt Brace, Jovanovich College Publishers, 1993, 208 pp.

Banks, James A. An Introduction to Multicultural Education. Allyn and Bacon, Boston, 1994, 136. pp.

Banks, James A., Multiethnic Education: Theory and Practice Allyn and Bacon, Boston,1981, 319 pp.

Banks, James A., Multiethnic Education: Theory and Practice, Third Edition, Allyn and Bacon, Boston, 1994, 330 pp.

Banks, James A., Teaching Strategies for Ethnic Studies, Allyn and Bacon, Boston, 1997,574 pp.

Banks, James A., "The Implications of Multicultural Education for Teacher Education", Frank H. Klassen and Donna M. Gollnick (Eds.),

Pluralism and the American Teacher. Ethnic Heritage Center for Teacher Education, American Association for Colleges of Teacher Education, Washington, D.C., 1977, 26 pp.

Bennett, Christine E. Comprehensive Multicultural Education: Theory and Practice Allyn and Bacon, Boston, 1995, 452 pp.

Campbell, Duane E., Choosing Democracy A Practical Guide to **Multicultural Education, Merrill,** an imprint of Printice Hall, Columbus, 1996, 381 pp.

Clothier, Grant M. "Inner-City Teachers: A Preservice Model" Theory into Practice, Ohio State University, Volume XI, Number 4, October 1972, 252 pp.

Cottrell, Donald P. Editor, Teacher Education for a Free People, American Association of Colleges for Teacher Education, Oneonta, New York, 1956, 415 pp.

Cross, Beverly E., "How Do We Prepare Teachers To Experience Race Relations?" Educational Leadership March 1993, pp. 64 -65.

Cushner, Kenneth, McClelland, Averil and Stafford, Philip, Human Diversity in Education, McGraw-Hill Companies, Inc., New York, 1996, 330 pp.

Faltis, Christian J., Join-fosterina: Adapting Teaching Strategies for the Multicultural Classroom Maxwell Macmillian International, New York, 1993,179 pp.

Flowers, John G. Et al., School and Community Laboratory Exuberances in Teacher Education. American Association of Teacher Colleges, Oneonta, New York,1948,310 pp.

Gay, Gena, "Building Cultural Bridges", Education and Urban Society Volume 25, No.3, May 1993, pp. 285 - 299.

Gollnick, Donna M. and Chin, Philip C., Multicultural Education in a Pluralistic Society Merrill, an imprint of Macmillan College Publishing Company, New York, 1994, 358 pp.

Grant Carl A. Editor Education for Diversity An Anthology of Multicultural Voices, Association of Teacher Educators, Allyn and Bacon, Boston, 1995, 424 pp.

Grant, Carl A., Editor, Sifting and Winnowing: An Exploration of the R~hb B_n Multicultural Education and CBTE, Teacher Corps Associates, University of Wisconsin, Madison, 1975, 253 pp.

Grossman, Herbert, Teaching in a Diverse Society, Allyn and Bacon, Boston, 1995, 340 pp.

Hilliard, Asa G., "Restructuring Teacher Education for Multicultural Imperatives", William A Hunter (Ed.), Multicultural Education Through Competency-Base Teacher Education. American Association of Colleges for Teacher Education, Washington, DC, 1974, pp. 44- 45.

Hunter, William A., Editor, Multicultural Education Through Competency Based Teacher Education, American Association of Colleges for Teacher Education, Washington, D.C., 1974, 276 pp.

Kendrell Frances Diversity in the Classroom: A Multicultural A Approach to the Education of Young Children, Teachers College, Columbia University, New York, 1983, 23 pp.

Klassen, F. H. Gollnick, D. M. et. al., Multicultural Teacher Education: Guide in e for implementation (Volume IV). Washington, D.C., Commission on Multicultural Education, American Association of Colleges for Teacher Education, 1980, 302 pp.

Lynch, James, Multicultural Education in a Global Society, The Falmer Press, Philadelphia,1989, 191 pp.

Mendez, Luis, and Felipe Clay, Editors, Diversity and Challenge in Teacher Education, Papers from the Illinoisan/Indiana ATE Mini-Clinic, Eastern Illinois University, Charleston, Illinois,1987, 130 pp.

National Council for Accreditation of Teacher Education Standards for the Accreditation of Teacher Education Washington D.C., 1977,21 pp.

Nieto, Sonia, Affirming Diversity, Longman Publishing Group, 1992, 335 pp.

Ownby, Amela C. and Perreault, Heidi R., "Teaching Students to Understand and Value Diversity", Business Education Forum, February, 1994, pp. 27 - 29.

Pai, Young, Cultural Foundations of Education, Merrill Publishing Company, Columbus, 1990, 256 pp.

Seelye, H. Ned, Teaching Culture: Strategies for Intercultural Communication National Textbook Company, New York, 1993, 336 pp.

Siccone, Frank, Celebrating Diversity: Building Self-Esteem in **Today's Multicultural** Classroom, Allyn and Bacon, Boston, 1995, 248 PP

Singer, Alan, "Reflections on Multiculturalism", Phi Delta Kappan, December 1994, pp. 284 -288.

Sleeter Christine E. and Grant, Carl A., Making Choices for Multicultural Education: Five fiches to Race. Class, and Gender, Macmillan Publishing Company, New York, 1994, 262 pp.

Sleeter, Christine E., "Multicultural Education: Five Views", The Education Digest, March 1993, pp. 53 -57.

Stone, James C. and DiNevi, Donald P., Editors, Teaching Multicultural Populations Van Nostrand Reinhold Company, New York 1971, 443 pp.

Timm, Joan T., Four Perspectives in Multicultural Education, Wadsworth Pub blishing Company, New York, 1 996, 296 pp.

Tiedt, Pamela L. and Tiedt, Iris M., Multicultural Teaching: A Handbook of Activities . Information and R e sources Allyn and Bacon, Bo, 1995, pp. 427.

United Nations Educational, Scientific and Cultural Organization, Education for Human Rights and Fundamental Freedoms, Eighteenth Session, Paris, 1974, 258 pp.

Vold, Edwina Battle (Ed.), Multicultural Education in Early Childhood. National Education Association, Washington, D.C., 1995, 79 pp.

Williams, Michael, "Multicultural/Pluralistic Education: Public Education in America", The Clearing House, November 1995, pp. 131 134.

Wynn, C. "Teacher Competencies for Cultural Diversity", In W. A. Hunter (Ed.), Multicultural Education through Competency Teacher Education, Washington, D.C., American Association of Colleges of F Teacher Education 1974, pp. 95 - 111.

CONFLICT MANAGEMENT: AN ESSENTIAL TOOL IN BUILDING A HEALTHY SCHOOL CLIMATE

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"We live in one world and each act affect the Whole"- Corita Rent.

THE SCENE

Two students are arguing in the hallway outside of Mrs. James' room in the Middle School. Anger has escalated, and the boys start pushing each other around. Voices rise; tempers flare.

A teacher walks by them quickly, ignoring them, while the hall supervisor who was on duty at the other end of the hall, comes running up to see what the ruckus is all about. One student has fallen to the floor having been pushed against a locker. The supervisor realizes that he isn't really hurt and that the other boy is helping him up with an apology.

Incidents like this and worse have become more frequent at this Middle School. The supervisor is upset about the incident, and angry because the teacher has ignored the situation and could have prevented the argument from becoming physical if he had stepped in immediately.

Arguments and fighting seem to be increasing in many schools throughout the world. We try to explain the rise in violence by recognizing the lack of good models of non-violent behavior and situations on television, in many movies, computer games, newspapers, and some sports. The gap between the haves and the have-nots and the visibility of this gap on a global level are obvious. THE SCOOP ON VIOLENCE AND KIDS IN THE UNITED STATES (from a pamphlet, *Kids' Conscious Acts of Peace*, Ben & Jerry's, Box 240, Route 100, Waterbury, VT 05676)

Homicide is now the third leading cause of death for elementary and middle school children.

A typical U.S. child witnesses 8,000 murders on television by the time he or she leaves eighth grade.

1 out of 6 teenagers knows someone who has died in a violent incident.

In a 1993 national survey, 11% of public school teachers and 23% of students reported being victims of violence in or around their school.

What can be done about these unsafe, unhealthy acts, particularly in schools and other places where children and youth spend their time? This paper addresses that important question. Several examples follow.

THE COMMUNITY DISPUTE RESOLUTION CENTER (CDRC) OF JACKSON COUNTY, OREGON, IN THE U.S.A.

The CDRC is a non-profit volunteer center established in 1990. The Center provides training in conflict management skills as well as a variety of mediation services. A pilot program to teach staff, students, parents and community leaders how to manage conflict creatively was initiated in 1993 in Ashland Middle School. Projects expanded last year throughout the county to where 10 experienced trainers served 12 different sites and groups of people working with children and youth, as well as with their parents and teachers.

In November of 1996, a second basic training of volunteers took place which brings twenty additional volunteers into our Education Cadre. We used radio, television, newspapers and personal contacts to recruit potential trainers, making a special effort to seek Spanish-speaking men and women in order to better serve that segment of our county community.

The CDRC Curriculum Manual contains five modules:

--What Is Conflict? (includes attention to different modes of responding to conflict);

--The Relation of Feelings to Conflict Management;

--Active Listening Skills of Communication;

--Effective Asserting; and

--Collaboration and Problem-Solving.

Seven experienced members of the Education Cadre paired up to present each of the five modules employing techniques such as role-play, elicitive questioning, brainstorming, and win-win negotiations. Serious activities were interspersed with humor and what we call icebreakers.

An example of an opening icebreaker is: Find a partner you don't know very well, and in five minutes you both must learn from one another, answers to these questions:

1. Why each of you is interested in conflict management;
2. Some things about you that the group would find interesting;
3. How each of you can support the other during the workshop;
4. What special qualities each of you brings to this work.

Another icebreaker deals with expanding our repertoire of describing feelings, such as *humiliated, irritated, eager.* Write each feeling on a separate index card, shuffle the cards, and have each participant draw a card; then, one by one, act out the feeling until someone in the group guesses what it is.

PROCEDURE FOR DEVELOPING A WORKSHOP PLAN

The procedure we use for creating a training plan for a school or community organization is as follows. First a request comes into the Center and an experienced CDRC Team Leader is assigned to the project who then makes an appointment to talk with site personnel. Usually the Team Leader invites another volunteer to join with him/her, either an apprentice or another experienced volunteer. This Needs Assessment session is to determine what kinds of conflicts the school or organization is experiencing; the range of knowledge and experience in communication and problem solving the staff has; what expectations, anxieties, time constraints exist; how conflicts are usually handled, including discipline; what the general climate of the workplace is, etc.

Next, this information is used in a Planning Session during which the Team Leader and other volunteers assigned to that project review the assessment information. A Sequence of Instruction is created that best seems to meet the conflict management needs of the group to be trained and the logistics, such as time constraints and schedule. When fleshed out, a draft is sent for review to the site representatives (whom we call the Anchor) along with a copy to the administrator of the school for information and reactions.

The Team Leader revises the Sequence of Instruction if necessary and works out the logistics for the training with the Anchor. A simple contract in the form of a letter is drawn up, specifiying the responsibilities of the CDRC Team and the Anchor, as well as the cost. We charge a $50 an hour fee for the training which helps to finance the costs of operating the Center.

Assistance is provided to the school in seeking financial support from a local community business or individuals. No one is denied service on the basis of funding.

Training is presented, followed with evaluation by participants, the Anchor and trainers. A brief report is written by the Team Leader, filed in the Center office for future reference, and sent to the site administration and Anchor.

Our trainings to date have varied from an eight one-hour series with educational assistants (teacher aides) at a middle school to two three-hour sessions with a private non-profit school to a one-and-a-half hour presentation to a parent-teacher group.

Here is an example of a fifty minute Sequence of Instruction that we used in assessing personal modes of dealing with conflict.

1. Distribute the handout on "Adult Modes of Dealing with Conflict: Self-Assessment" asking each participant to fill it in. See Figure 1 (TIME: 20 minutes) Share with a partner.
2. Distribute and discuss a handout on "Styles of Conflict". There are different versions of styles. (One of several that we use is found in *MANAGING CONFLICT: A Curriculum for Adolescents.* Albuquerque: New Mexico Center for Dispute Resolution 1989.) See Figure2. (TIME: 15 minuses).

   Using the handout on "Styles of Conflict," have each participant ascertain whether they seem to have a dominant mode of responding to situations similar to those in the first handout or instead, use several styles. (We often use a longer version of these examples, and will vary the items depending on the group.)
3. Share tendencies in the group as a whole, discussing the range of differences. (TIME: 15 minutes)

Facilitators discuss that no one mode is suitable in all situations; each has advantages and drawbacks. The challenge is to "find" the most appropriate response.

Figure 1 - ADULT MODES OF DEALING WITH CONFLICT: SELF-ASSESSMENT

Please be BRIEF in your answers.

1. When someone borrows a lawnmower or a book I treasure, and doesn't return it,

How I feel is ____

What I do is ____

2. When a dose friend breaks a confidence,

How I feel is ____

What I do is ____

3. When a student is defiant,

How I fell is ____

What I do is ____

4. When other staff members don't listen to my ideas,

How I feel is ____

What I do is ____

5. When kids at school get into a fight,

How I feel is ____

What I do is ____

Figure 2 - STYLES OF CONFLICT

DENIAL	You may choose to ignore a problem or situation thinking "Everything is okay. There's nothing wrong." Someone asks, "What's the matter? What happened? You respond: "Nothing. Never mind. Leave me alone." Or, "Who, me? I didn't say that. It's not my fault."
AVOIDANCE	You walk away from the problem. You go out of your way to stay away from a person.
CONFRONTATION	You choose to verbally attack someone else or their ideas through name-calling, antagonizing, bullying, belittling, criticizing or using put-downs. This may lead to physical fighting or abuse.
PROBLEM SOLVING	You choose to talk over the problem and work together to come up with a solution that everyone can live with.

> Sooner or later all the peoples of the world will have to discover a way to live together in peace, and thereby transform this pending cosmic elegy into a creative psalm of brotherhood. If this is to be achieved, man must evolve for all human conflict a method which rejects revenge, aggression and retaliation. The foundation of such a method is love.
>
> __________Martin Luther King, Jr.

THE PHOENIX/TALENT SCHOOL DISTRICT FOUR-YEAR PROJECT

Creating safe, caring schools is a major strategy being used to prevent violence. In some regions of the United States, partnerships have been formed to teach staff, students, parents and members of the broader community vital skills of effective communication and problem solving.

A recent example of a partnership is the coming together of the Rogue Valley Commission on Children and Families, the Phoenix/Talent School District, the Boys and Girls Club of Rogue Valley, and the CDRC. These four agencies joined in writing a proposal for funding from the Edward Byrne Memorial State and Local Formula Grant Program. Federal monies are allocated annually to be used for combating drug abuse and violent crime. Each year in Oregon, the Governor establishes a focus for the use of these funds, one of them being School Based Violence Prevention Education for the 1996 year.

In preparation of the grant proposal, a review of research studies and change strategies was done. One particularly helpful reference was from Hawkins, SOCIAL DEVELOPMENT STRATEGY, 1993, which identified Risk and Protective Factors for Juvenile Delinquency. See Figure 3.

Jackson County residents hold the vision of attaining a community that is safe and healthy. County-wide health and safety benchmarks have been adopted which include one to reduce the county's juvenile crime rate. An integral element of the community's plan is the inclusion of Community Prevention Strategies which create a coordinated, school-based continuum of care to youth who are not yet involved in the juvenile system or who are at high risk of juvenile delinquency. The overall goal is to reduce the number of youth who use violence as a means of conflict resolution.

FIGURE 3- RISK AND PROTECTIVE FACTORS FOR JUVENILE DELINQUENCY

Category	Risk Factors	Protective Factors
Individual	alienation, lack of bonding to society, poor impulse control, early onset of problem behaviors.	resilient temperament, positive attitudes, prosocial family, problem solving skills
Family	substance abuse, child abuse, family conflict, parental rejection, in-adequate supervision, single parent families.	bonding wit prosocial family members, provision of clear standards for behavior by the family
School	early academic failure, lack of commitment to school, anti-social behavior	bonding with teachers, commitment to school
Peer Group	friends involved in crime and violence	healthy friendships with prosocial peers
Community	poverty, high rates of drug abuse and crime, low neighborhood attachments, availability of drug & weapons	clear standards for behavior and recognition of positive behavior

Several studies have found that participation in extracurricular activities or clubs can be an important informal source of support (Garmezy, 1983; Werner & Smith, 1983). According to a Columbia University study, Boys and Girls Club programs have reduced juvenile crime rate by thirteen percent (Mender, 1995). The efficacy of peer mediation and conflict resolution has not been determined because of a lack of research. The "Resolving Conflict Creatively Program" developed by the Educators for Social Responsibility has been reviewed and shows promising results.

The Phoenix/Talent School District has one high school, a middle school, and three elementary schools. The new four-year project begun with the middle school, and after some intense preliminary planning, the five Science/Health teachers have committed themselves to directly teaching sixth, seventh, and eighth grade students the skills of communication and problem-solving essential to conflict management. About one-third of the rest of the teachers have asked to be part of the first year of training in which they will learn ways to integrate conflict management skills and concepts into their regular curriculum. Training begins January 13, 1997.

The CDRC has the responsibility to train both groups of teachers. The curriculum will combine teaching strategies drawn from CDRC's *Curriculum Manual (1996); Conflict Resolution in the Middle School: A Curriculum and Teaching Guide* published by Educators for Social Responsibility (ESR); and *Managing Conflict: A Curriculum for Adolescents* from the National Resource Center for Youth Mediation in New Mexico.

The overall strategy for change is an excellent one which is being adapted from ESR's program "Resolving Conflict Creatively". Their program is based on the premise that human aggression is a learned behavior, taught through example and reinforced by a culture that glamorizes violent responses to conflict. Conflict, with its roots in competition, poor communication, and miscalculation, is a normal part of life. In itself, conflict is neither good nor bad. It's how we respond to it that is functional or dysfunctional, appropriate or inappropriate, escalating or de-escalating of conflict. Linda Lantieri, Director of ESR's Program states, "we need to demonstrate that the highest form of heroism is a search for creative non-violent solutions."

The strategy includes 20 hours of training for the teachers instructing students directly in the shills of conflict management and six to ten classroom visitation and mentoring sessions for each of these teachers. They will do frequent debriefing and sharing during their common planning period. The teachers who will integrate conflict management into their regular curriculum will have an initial training session of six hours, followed by frequent two-hour opportunities to study the curriculum materials which CDRC volunteer staff will select for them based on their needs. All participants will be encouraged to adapt and create "lessons" that come from the real conflicts students, staff, parents, and community are experiencing. All participants will come together every four to six weeks to share their successes, glitches, questions, and ideas.

Staff of the Boys and Girls Club will be a part of the training process. By the end of three years, the entire middle school staff and many parents will received training; the high school staff will begin theirs in the third year; and the elementary schools' personnel will become full partners in the program by the fourtth year. It is anticipated that the local governing bodies, businesses and service organizations will be fully informed of the program, and that many of their members will become a part of the training. It is our vision that whole communities will use effective conflict management skills in the resolution of problems before they escalate into violence and crime--a worthy goal indeed!

DEALING WITH DIVERSITY: THE USE OF STORY TO EXPAND EMPATHY

VECS is an acronym that means validating (V), empathizing (E), clarifying (C), summarizing and synthesizing (S). As trainers and teachers work with people to expand their responsiveness to these four qualities, it is productive to focus on each one in ways that help participants connect their own personal experiences to each quality. One technique is to share personal experiences. With respect to empathizing, the story that Sara Holbrook wrote last year in an essay contest at Ashland High School in southern Oregon is illustrative. Sara entitled her essay "The Silent Intolerance." Excerpts from her essay follow.

"Because tolerance for differences is achieved through the images and ideals taught to you as a child, I looked to my first introduction to intolerance and instantly thought of Billy. . His weight had fluctuated for years but he'd always been different from everyone else and no one let him forget it. From the first day he walked into class [kindergarten], and joined the circle in the center of the room, he was nicknamed Chunk. . . Though at this point, the bullies were small, their taunting words were not, and soon it wasn't just children anymore. Any time parents would come into the classroom to help, even they would pin in the "subtle" prejudice. Whether it was a silent glance of disgust during snack time or a smirk during gym, they found a way to make his life just a little more difficult. As if this brutal torture wasn't enough to endure, Billy's own teachers contributed to making his world a little more trying by making jokes or just simply with their eyes . . .

Throughout this entire ordeal, even though I felt bad for Billy, I just thought of him as a typical overweight guy who probably ate a little too much and had fun with all of the jokes. But all of this changed one day when Billy's mother came over to our house to visit with my mother, and I listened to what she had to say about Billy"s struggle. Listening to her speak was like taking a glimpse into someone's broken heart. Through the wall I heard a heart-breaking story of a three-year-old who accidentally swallowed rat poison and nearly died, but instead was condemned to live with the frustration of a damaged intestinal track and endless intolerance. It was that day in the fourth grade when my eyes first opened and I truly woke up. I realized that for as long as I could remember someone had been subjected to ridicule and total intolerance because of something they had no control over. Because I was silent, I was part of the problem. . .

Though it may not be what most people think of when they think of intolerance, it's what touched me, and it is important to realize that weight prejudice not going away. For it truly is the quiet prejudice that is the most venomous and difficult to cure. It has recently been proven that those individuals who are overweight in the United States have a harder time receiving jobs, buying cars, and renting apartments than other more physically accepted individuals. . . Whether it be weight prejudice, racism, sexism, or any other form of intolerance, it is important to note that, by whatever name you call it, any form of intolerance is hatred and can only be conquered with love and a pure acceptance of one's self."

One way that we use stories in a training is to have participants get into groups of four and share a personal experience that deeply moved and caused them to shift their perspective about another person. In preparation, a story like Sara's could be told or read and the group given time to reflect on their own life After each one shares an experience, we ask the small group to select one of their stories to relate to the whole group. After this, discussion of questions like

--What happened inside you as you listened to one another's stories?
--What feelings and insights did you have?
--How might these kinds of understandings help make your school, workplace or family more safe and peaceful?

Communication on all levels is necessary for survival in the twenty-first century and beyond. One of the greatest communicative challenges facing us today is to develop the ability to listen to our own inner visions, voices, imaginings, and dreams bearing insights about human intellectual capabilities, and to accept the visions of children.

__________Beverly-Colleene Galyean

TEACHING TOLERANCE: ANOTHER APPROACH TO DEALING WITH DIVERSITY

The Southern Poverty Law Center (SPLC) in Montgomery, Alabama, has produced a video-and-text entitled The Shadow of Hate". More than 50,000 schools, universities and civic organizations have requested the materials which expose students to aspects of America's past which are often left out of history books. These facts challenge students to examine their own attitudes and beliefs. Some schools have built entire tolerance units around the SHADOW kit. A high school teacher in South Dakota describes her unit: This packet was the foundation for my American Lit classes. I wove these stories into the curriculum, and amazingly dynamic things happened! First some passiveness, then polarizing, then anger, then learning to resolve conflict, then finding commonality and levels of acceptance--making room for differences--that did not previously exist within the classes. Students became kinder to each other, more conscious, more aware, more honest, more communicative.

The SPLC publishes a semi-annual journal called *TEACHING TOLERANCE* which is mailed at no charge to educators. (Contact the Editor, *TEACHING TOLERANCE, 4* Washington Avenue, Montgomery, AL 36104, FAX (205)264-3121.

Finding common ground and a common language will become an increasingly essential goal. Academia can play a key role in the development of an integrated model of theory, practice, and research.

________Cheryl Picard

Another helpful group is NAME: an association for conflict resolution in education at the National Institute for Dispute Resolution in Washington, D.C. NAME publishes a bimonthly newsletter called *"The Fourth* R", and the June/July, 1996, issue (Volume 73) is devoted to Building Caring Schools and Communities and presents multi-faceted approaches to the problems of youth violence.

Cheryl Picard in her excellent article raises many of the key questions to be addressed by Academia, such as, "At what stage in the development of conflict and its resolution are we, and what role does theory play in this development?. . .What methods of formal and informal education and training are currently being used in the field? What are the short and long term effects of these methods? And how might we teach on a larger scale?"

Dr. Picard is the Director of The Mediation Centre at Carleton University, Ottawa, Ontario, Canada. The Centre is a teaching and research unit as well as a conflict resolution service centre for staff, faculty, students, and off-campus groups. The faculty is in the challenging process of rethinking traditional programing in order to meet the needs of students and the realities of to day's university mileau. Cheryl Picard can be reached at (613)520-5765. EVALUATION PLEASE: WHAT ELSE IS HAPPENING?

The National Resource Center for Dispute Resolution has recently published a manual entitled *SCHOOL MEDIATION EVALUATION MATERIALS.* For ten years the Center has been testing several evaluation Instruments for reliability and validity, and revised versions of these instruments are found in the manual. They include a Student Observation Form, a Conflict Opinion Scale for Teachers, and a Student Attitude about Conflict Scale. Sample items from each instrument are as follows:

Student Observation Form: (uses a rating scale from 1 (no, not at all) to 6 (yes, very much)

#6 Is this student a good listener?
#10 Is this student able to verbally summarize another's ideas well?

Conflict Opinion Scale for Teachers:

#19 Student conflicts can be most quickly resolved by calling the student' parents.
#31 In my school, a student often steps in first to resolve a dispute among others.

Student Attitudes About Conflict: (uses a scale of Strongly Disagree, Disagree, Agree, and Strongly Agree)

#10 When people talk, I have a hard time paying attention.
#19 Other kids will think I'm afraid if I don't fight when someone makes me mad.

282

CONCLUSION

As volunteers at the Community Dispute Resolution Center, we are committed to the ethic of living by the skills and concepts that we teach. Confucius said: I hear and I forget. I see and I remember I do and I understand.

We view our teaching and learning as lifelong. When an interpersonal conflict or hurt feelings arise within the CDRC Cadre, we pledge to give one another honest, loving feedback, striving to understand one another's point-of-view and intent. When debriefing a workshop, we encourage the participants to share what worked for them, what didn't work for them, and suggestions for what might happen in the future. AND, when one of us finds him- or herself unclear, confused, or buttons pushed, we promise to work through our internal conflict. We believe that we can't teach with true clarity unless we practice what we are assisting others to do.

Another saying of Confucius is:
Human beings draw close to one another by their
common nature, but habits and customs keep them apart.

The need to understand one another across our different backgrounds and personalities is crucial in today's world. Our hope is that if we learn to communicate and problem-solve effectively at the personal daily life level, nations will be able to use the same processes.

Angeles Arrien recently said in a workshop on Mentoring, that there are three forces that affect each of us in our daily lives: the unifying force that is based in love, the separating force of fear and self-doubt, and the integrating force that binds us all together in this wondrous, mysterious, chaotic world.

PERSONALITY AND TEACHING PERFOMANCE OF STUDENT TEACHERS: IMPLICATIONS FOR TEACHING EFFECTIVENESS

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INTRODUCTION

Teachers are entrusted with the teaching and learning of future generations. With the rapid changes of technology and life styles, the effectiveness of teacher education programme is being scrutinized. Research has shown that teaching teas become more complex that requires certain personal qualities among the teachers especially where they are directly concerned with enhancing the learning process of their students. Richards (1989) indicated that some of the characteristics shown as determinants of good teaching were self- confidence, academic ability, prior experience, internal locus of control and the belief that they were in control of themselves and their actions rather than external forces.

Ryan (1982), stated that effective teachers do possess interpersonal skills and positive personality characteristics Niemi (1985) found that student teachers with introvert and conventional personalities did encounter problems during teaching practice. The student teachers reported that practical teaching was exhausting and they exhibited psychosomatic symptoms and consequently their performance during practical teaching was considered poor. The study concluded that personality traits affected student teachers' performances because the feeling of apprehension increased when they realised there was no improvement m their teaching. In another study, study, (1987) reported that, based on students' evaluation on teachers' personal characteristics, the most effective teachers were seen to be non punitive, consistent and enthusiastic.

In view of these findings, it is imperative that more studies should focus on the personality factors of student teachers for two main reasons. Firstly, since the acquisition of knowledge and learning skills are much affected by the effectiveness of teaching, student teachers' personality factors that facilitate that behaviour have to be determined. Secondly, if the personality factors of effective teachers are well substantiated, then future teachers can identified using personality inventory.

Method

a. The Respondents

The subjects of this study were 101 final year students from Universiti Pertanian Malaysia (UPM) who underwent practical training in the final eighth semester. The sample was based on the total responses received by mail. There were 44 girls (43%) and 57 boys (56%). The age range was 21-44 years old and the age mean was 22.7 years old.

b. Instruments and Data Collection

The Malay version of 16PF personality test developed by Cattell was used to, generate data on personality traits. The reliability of the translated version of the test was found to range between 0.70-0.90, when the test-retest was done within several days. A 12 item questionnaire (Likert Scale) was developed to appraise students' perception towards teaching practice. In addition, 3 open-ended questions were also included to gauge the student teachers' opinion towards teaching practice. The reliability of the questionnaire, using the Cronbach Alpha, was 0.88. The 16PF test was administered before the student teachers left for their practical training. The questionaire was posted to the respondents at the end of their practical training.

The student teachers' academic performance was measured by using their practical training grade and cumulative grade point average (CGPA) for the academic year.

Results and Discussion

a. The Personality Factors and Practical Teaching Performance

The stepwise regression analysis result (Table 1) indicated that only personality Factor E as contributing significantly to the teaching performance of the student teachers. The multiple R value ($R= 0.33, p < .05$) showed am average relationship between personality and teaching performance. The R^2 value was .2281 which shows that the personality Factor E contributed 23% to the variation in teaching performance.

Table (1)
Stepwise Regression for Dependent Variable Performance

Variable (Personality)	Beta	Standardised Beta	t	p
Factor E	.2023	.3286	2.826	.006
Constant	64.6483	64.6483	19.749	.000
Multiple R=.3286		Adjusted R^2 =	.2281	
F value = 7.9866		Significant F =	.0062	

Factor E personality is characterized by assertiveness, confidence and the ability to think independently, but at the same time aggressive, competitive and stubborn. These personality characteristics correlated significantly with good teaching performance. However, on the other hand, submissive personality such as dependent, anxious for obsessional correctness, and docility show symptoms of neurotic syndromes.

b. Personality and Student Perception toward Teaching Practice questionnaire.

The students' perception towards teaching practice was appraised by the 12 item In general it was found that the student teachers' perception towards teaching was positive (mean-1.93, SD=0 33).

The correlations between students' personality and their perception toward teaching practice ranging from .12 to .35. However, the significant correlations are Factor B. Factor C, Factor H and Factor E. The magnitude of correlation is indicated in Table 2.

Table (2)
The Relationship Between the Student Teachers' Perception Towards Teaching Practice and Their Presonality Traits,

Personality	r	p
Factor B	.25	.01
Factor C	-.25	.001
Factor H	-.24	.5
Factor E	.29	.01

* *Personality Factors (Appendix).*

There was a positive and **significant relationship between personality Factor** B ($r=.25$, $p<.01$) and Factor E ($r=.29$, $p<.05$) and perception towards teaching practice. Factor B indicated high scholastic mental ability such as quick to grasp ideas, fast learner and intelligent while Factor E stated that a person is self assured, assertive and dependent-minded. According to the open-ended response on the Perception Inventory, the student teachers mentioned that on the whole they enjoyed teaching practice and found their experiences very useful especially on the knowledge gained in instructional techniques and classroom control. Teaching practice had in fact roused further interest in the teaching profession

However there was a negative relationship between personality Factor C (($r=.25$) $<.001$) and Factor H ($r=-.24$, $p<.05$)) and perception towards teaching practice. Factor C showed a fretful person, easily annoyed and active in dissatisfaction while Factor H indicated a personality that is shy, cautious, withdrawing with inferiority feelings. From the student teachers' responses to the Perception Inventory, it was found that some of them said that the teaching load was heavy, they were exhausted, they could not utilise the teaching aids effectively, did receive cooperation from the guidance guidancce regarded as "outsiders" by the school teachers, the teaching practice span was too long, lesson plan preparation was laborious and they could not teach effectively On the whole these student teachers did not find teaching practice a useful and educative experience

c. The Personality Factors and Academic Performance

Student's CGPA for that particular year of study is used as the indicator for academic performance. Based on the stepwise multiple regression analysis, Factor r and Factor L contributed 24% towards the academic performance variance (Table3).

Table (3)
Stepwise Procedure for Dependent Variable Academic Performance

Variable (Personality)	Beta	Standardised Beta	t	p
Factor H	-.0429	.3149	-2.69	0.008
Factor L	.0394	.2555	2.186	0.0321
Constant	2.965		3.007	0.0036
Multiple R=.3412		Adjusted R^2 =	.2407	
F value = 4.677		Significant F =	.0124	

Table 3 shows that personality factors H and L were factors that contributed significantly to the variation in academic performance of the student teachers. Based on these findings, the academic performance can be predicted using the regression formula: CGPA= -.0429(Factor H) + 0.394 (Factor L) + 2.965. This formula significantly predicted the student academic performance ($F=4.677$, $p<.0124$)

The characteristics of the personality Factor H. such as being restrained, withdrawn and shy showed lower academic achievement as compared to those student teachers were bold, uninhibited and and spontaneous The of the personality Factor L, such as free of jealousy, adaptable, cheerful and concerned about other people showed good academic performance.

In general, it can be summerised that student teachers with good personality and good academic performance showed positive perception towards teaching practice as compared to those with opposite personality traits and weaker academic performance.

Implications and Suggestions

To some extent teaching practice is not perceived well by a certain number of student teachers. Therefore, these trainees must be well informed of the importance of this professional training and a mental set on problems during teaching practice. The notion that trainees should be looking forward to teaching practice should be ingrained in them so that they would not be intimidated by it.

Since personality factors affect student teachers' perception towards teaching practice, then the trainees who perceive teaching practice negatively can be duly identified. To do that identification, perhaps certain measures should be formulated. Among others a diagnostic instrument containing evaluative items to evaluate student teachers could given due consideration. Major categories could be incorporated such as, personal traits, professional competence, student-teacher relationship and classroom management. An inventory of student teacher traits could also be looked into as a summative evaluation. A checklist could also be prepared to contain a comprehensive set of knowledge, skills and attitudinal behaviour pertaining to quality student teaching (Ediger, 1987). A checklist is useful in the sense that it can be regarded as a flexible method of evaluating that can generate additional comments on the student teaching progress.

Based on the findings, it was found that some Personality factors correlate with teaching performance during teaching practice. These findings are in line with other findings which suggest that personality factors affect teaching performance. Therefore further research has to be conducted to answer questions such as what criteria should be used in selecting, training and hiring of teachers, and when these measures should be taken; at the time of entrance to the teacher preparation programme, or at the end of training and at the time of certification (Olstad, 1988).

Since the findings suggested that some personality factors affect teaching performance, teacher trainers should be sensitive to the trainees' personality so that a complete supervision plan can be devised such as: system of advising, quality interactions and motivation techniques in accordance with the personality of the student teachers so that the trainees can easily internalise positively the suggestions to improve their teaching performance.

References

Dove, L. A. (1986). *Teachers and Teacher Education in Developing Countries* London: Croom Helm

Ediger, M. (1987). *Evaluating Teaching Performance*

Martin, D. V. (1987). *Use of Stimulated Recall in Videotape Analysis of Student Teachers ' performance.* Action in Teacher education, v9, ,n 3, p7 1-83,

Niemi, H. (1985). *Matinee nopettaja harjoittelijoiden opetu songelmat.* Research report, Department of Teacher Education, University of Helsinki).

Olstad, R. G. (1988). *The Relationship of NTE Exams to Teacher Education Admission, Performance and Employment.* Paper presented at the Annual Meeting of The American Association of Colleges For Teacher Education. New Orleans.

Richards, J. C. (*1989). Psychological and Personal Dimensions of Prospective Teachers ' Reflective Abilities.* Peper presented at the Annual meeting of the American Educational research Association. San Francisco.

Ryan, K (1982). *Teacher Characteristics.* Encyclopedia of Educational research, New York: The Free Press.

Appendix
Descriptions of the relevant Personality Factors (Cattell)

Factor B

Less Intelligent, Concrete-thinking
(lower scholastic mental c capacity)

The person scoring low on Factor B tend. to be slow to learn and grasp, dull, given to concrete and literal interpretation. His dullness may be simply a reflection of low intelligence, or it may reperesent poor functioning due to psychopathology.

VS

More Intelligent, Abstract-thinhng Bright
(higher scholastic mental capacity)

The person who scores high on Factor B tends to be quick to grasp ideas a fast learner, intelligent. there is some correlation with level of culture, and some with alertness. High scores contraindicate deterioration of mental functions in path ological conditions.

Factor C

Affected By Feelings, Emotionally Less Stable, Easily Upset
(lower ego strength)

The person who scores low on factor C tends to be low in frustration tolerance for unsatisfactory conditions. changeable and plastic, evading necessary reality demands. neurotically fatigued, fretful, easily emotional and and annoyed, active in dissatisfaction, having neurotic symptoms (phobias, sleep disturbances psychosomatic complaints, etc.). Low factor C score is common to almost all forms of neurotic and some psychotic disorders.

VS

Emotionally Stable, Faces Reality, Calm, Mature
(higher scholastic mental capacity)

The person who scores high on Factor C tends to be emotionally mature, stable, realistic about life, unruffled, possessing ego strength, better able to maintain solid group morale. Sometimes he may be a person making a resigned adjustment to unsolved emotional problems.

Factor E

Humble, Mild, Accommodating, Conforming
(submissive)

The person who scores low on Factor E tends to give way to others, to be docile, and to conform. he is often dependent, confessing, anxious for obsessional correctness. This passivity is part of many neurotic syndromes.

VS

Assertive, Independent, Aggressive Competitive, Stubborn
(dominance)

The person who scores high on factor E is assertive, self assured, and independent- nt-minded. He tends to be austere, a law to himself, hostile or extrapunitive, authoritarian (managing others), and disreg arcs authority

Factor H

Shy, Restrained, Diffident, Timid
(threctia)

VS

Venturesome, Socially-bold, Uninhibited, Spontaneous

(parmia)

The person who scores low on this trait tends to be shy, withdrawing, cautious, retiring, a 'wallflower" He usually has inferiority feel ings. He tends to be slow and impeded in speech and in expressing himself, dislikes occupations with personal contacts, prefers one or two close friends to large groups, heand is not given to keeping in contact with all that is going on around him.

The person who scores high on Factor H is sociable, bold, ready to try new things spontaneous, and abundant in emotional response.His.'thick-skinnedness" enables him to face wear and tear in dealing with people and grueling emotional situations, without fatigue. However, he can be careless of detail, ignore danger signals, and consume much time talking. He tends to be "pushy" and actively interested in the opposite sex.

Factor L

Suspicious, Self-opinionated,
Hard to fool
(protension)

VS

Trusting, Adaptable, Free Jealousy, Easy to Get on With
(alaxia)

The person who scores low on factor L tends to be mistrusting and doubtful. He is often involved in his own ego, is self-opinionated and interested in internal, mental life. He is usually deliberate in his actions, unconcerned about other people, a poor team worker.

The person who scores high on factor L tends to free of jealous tendencies. adaptable, cheerful. un-competitive. concerned about other people, a good team worker.

KNOWLEDGE RESTRUCTURING AND TEACHER CHANGE IN THE CONTEXT OF A TRANSDISCIPLINARY CURRICULUM

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INTRODUCTION

We live in an era of rapid social, political, economic and technological change which affect all areas of human activity. Such a dynamic world, characterized by pluralism, ambiguity, information flow and easy accessibility to information, demands mayor changes in its educational systems, if schools are to be both relevant and influential. An important challenge for educators is therefore to find new and appropriate ways to deal effectively with the changing nature of knowledge, culture and society. A part of this challenge is to reassess the needs, beliefs, interests, knowledge areas, traditions and values of individuals and groups. Such considerations are likely to require a restructuring of educational goals and processes, namely by effecting changes in the school curriculum.

Undoubtedly, teachers, nowadays, play an important role in this search for new educational meaning and new curricular thinking and practices. In fact, the teaching fraternity is recognized as a vital link in curriculum improvement efforts (Vanderberghe, 1984) and as the agent or channel for curricular reforms (Ben Perez, 1994). However, a basic condition for successful curriculum redesign requires a change in teachers' educational perspectives. According to Cohen et al (1990), for example, curtent views of teaching and learning constitute an important obstacle in attempts to change patterns of classroom interaction. Strauss (1993) demonstrates that the mental model teachers have regarding the mind of a child and and how children learn resembles Atkinson & Shiffrin 's (1968) information processing model of learning and memory. Challenging these beliefs therefore becomes one of the mayor goals in education reform (Prawat, 1992; Zitlow, 1990) and should be a mayor element in the design of teacher education programs and inservice training (Strauss, 1993).

Research on teacher thinking has documented the fact that teachers develop and retain implicit theories about their students, the subject matter they teach, their role, and about learning and instruction (Kagan, 1990). Implicit theories are typically eclectic, based largely on previous practices and tend to be robust, idiosyncratic, and incomplete (Clark, 1988). Although teachers are not always aware of their own theories (Strauss, 1993), these theories have potentially important implications since they influence teachers' perceptions and judgments, which in turn affect classroom practice and the extent to which teachers are open to modifying their theories (Clark & Peterson, 1986). The implication is that if our goal is to redesign instruction and curriculum on the basis of a new conceptual approach (e.g. the constructivist paradigm), there is a need to help teachers develop new theories or new cognitive (mental) lenses through which to view both the world of education and their own profession.

Getting people to change their beliefs and knowledge is a difficult proposition, and teachers' are no exception. Moreover, teaching, like other professions, is far from immune to the 'quick fix' solution or fad (Kennedy et al, 1995). We have learned from science education that both scientists, adults and science students have a tendency to resist relinquishing prior or pre-instructional beliefs. Rather than abandon or modify former beliefs in the face of new, conflicting data and ideas, they often staunchly maintain old ideas and reject or distort new ones (Chine & Brewer, 1993, Strauss, 1993). With respect to teachers, this begs the following questions: Would teachers learning a new curricular paradigm present a similar cognitive behavioral pattern when faced with a different curricular approach? How would they respond to contradictory assumptions and expectations regarding basic principles of learning, teaching, curriculum planning, educational goals, etc.? Why will one teacher remain enthusiastic, open to learning, highly and mindfully committed to growth, and another teacher not? This study addresses these issues. It describes the knowledge restructuring and change processes occurring in teachers who participated in a project aimed at enhancing the idea of engendering a constructivist-based approach to curriculum using the transdisciplinary web. More specifically, we describe teachers' knowledge restructuring and change processes occurring as a result of a paradigm shift from a "product-transmission-discipline-based" curriculum approach to a "constructive-based transdisciplinary " curriculum paradigm (Levine & Nevo, 1996).

A substantial body of psychological and educational literature concentrates on the processes involved in the acquisition of new knowledge within a prior-knowledge framework. Some studies focus on *factors* that influence or lead to a cognitive change, while others describe and explain the *kinds* of cognitive changes that occur in individuals following a learning experience. Strike and Posner (1982) for example suggest three necessary *conditions* for successful conceptual change: dissatisfaction with existing beliefs and knowledge's; finding a proposed alternative approach both intelligible and useful in extending one's understanding of new situations, and calculating ways of linking the new beliefs to earlier conceptions. When dealing with *kinds* of cognitive change, Rumelhart & Norman (1981) suggest three kinds of possible change that take place in existing schemata as a result of new learning and experiences: accertation, tuning and restructuring. While the first two involves accumulation of factual data, or elaboration of data within an existing schema (knowledge structure), only the restructuring kind of change involves the creation of a new knowledge structure.

Fewer studies, however, have explored the nature of *processes* or mechanisms which allow the acquisition of new knowledge and ultimately lead to the creation of new knowledge structures (Vosniadou & Brewer 1987). Influenced by research in the area of science education, the attempts of Vosniadou and Brewer to describe such processes or mechanisms led to the notion of weak and radical restructuring. Their research introduces a distinction between weak and radical restructuring reminiscent of the difference between theory change (weak) and true paradigm shift (radical). While weak restructuring' refers to the processes involved in the articulation of an existing paradigm that may result in a theory change (i.e enrichment and elaboration), it is only when these attempts fail that a true paradigm shift namely radical restructuring, occurs.

A thorough analysis of possible changes in cognitive processes, including restructuring processes, has been offered by Chinn and Brewer (1993) who were influenced by the role of anomalous data in scientific revolution (Humphreys, 1968; Kuhn, 1962). Their model represents a detailed analysis of the ways in which scientists and science students respond to anomalous data, that is, to scientific information that contradicts current theories held by a person. They suggest the presence of seven basic responses to anomalous data: ignoring, rejection, exclusion, abeyance, reinterpretation, making peripheral change, and finally, theory restructuring. The most extreme way to dispose of anomalous data is simply to ignore it, whereas the strongest effect that anomalous data can have on an individual is to impel the individual to change to a new theory. While one can view Chinn and Brewer's model as a classification scheme of possible responses to anomalous data, we believe it could also be viewed as a continuum, or change process that an individual may experience when faced with new or conflicting theory. The later view may be of value in assessing cognitive growor restructuring processes, and it is indeed the approach we took in conceptualizing teacher change and knowledge restructuring.

While the models mentioned above relate to learners of new knowledge in general and to scientists and science students in particular, Soter's (1995) model is unique for us as it deals specifically with the restructuring processes that occur when teachers are the learners. Influenced by Vygotzky's (1978) notion of "Zone of Proximal Development", Vosniadou & Brewer's (1987) restructuring concept, and Schon's (1987) theory of reflectivity, Soter suggests a model that enables her to signal the different levels of assimilation and accommodation of new knowledge, in the context of a teacher's reading and writing instruction. The model elaborates specific manifestation of weak and radical restructuring using the concepts of reflective attention, dissonance and disequilibrium. We were inspired to develop the model further through the addition of dimensions considered helpful in understanding the processes of teachers' knowledge restructuring.

Despite the variety of existing models describing the developmental stages, schemes, and processes that teachers are likely encounter when faced with educational change, it is well accepted that knowledge growth and knowledge restructuring are more idiosyncratic (Soter, 1995, Clark, 1 1988) and less systematic processes than any model can describe. In the context of our project, we therefore decided to use a qualitative methodology in order to deeply examine a few cases that, throughout their two years of experience with a new curriculum paradigm, have manifested different profiles of knowledge restructuring and change processes.

The present article focuses on four individual teachers with whom we worked for two years. Intrigued by the differences we observed among the teachers, and challenged by Soter's and Chinn & grower's models, we extended Soter's model with the aim of describing and analyzing the set of characteristics that distinguish those teachers who undergo radical cognitive change and peripheral change from those who have not yet restructured their knowledge.

The study content

We are involved in a multi-year action-research project aimed at restructuring the elementary school curriculum. The project is sponsored by the Israeli Ministry of Education, Culture & Sport, and is in its third year of operation. Our project team works intensively in 3 schools and about 70 teachers participate. Work with teachers includes workshops, group and individual consultation on novel approaches to curriculum, learning and instruction and also project team visits to classrooms. Constructivist principles suggested by Darling-Hammond & McLoughlin (1995) and Lieberman (1995) provided the basis for our approach to teacher counseling and instruction. A more detailed description of the training procedure appears in Levine et al (in press). This article delineates knowledge restructuring processes of four teachers following two years of experience with the new curriculum approach.

The Constructive-based Transdisciplinary Curriculum (CTC) approach

Two general characteristics differentiate the curricular approach advocated in our project from a traditional approach to curriculum. First, it is a constructivist-based approach and second, it is integrative rather than being discipline-based and using a product-delivery approach to Curriculum. A constructive-based, often referred to as "open system", approach, requires teachers to discard the notion of curriculum as a being a "course to run", and think of it more as a network of important ideas to be explored. In other words, the curriculum should not be regarded as a product to be transmitted to students, but as a complex interactive process (Levine, 1995). The integrative nature of the curriculum redirects the focus from discipline (well defined contents and structures) to the student and reality.

The transdisciplinary approach to the curriculum is one of several frameworks for conceptualizing an integrative curriculum (Drake 1993, Jacobs, 1989). It is conceived as a real-world approach emphasizing meaning and relevance through a life-centered approach. Knowledge, within a transdisciplinary framework, is explored in real-life or cultural contexts, and contents are determined by themes and students' interests, rather than by predetermined guidelines (Drake, 1993). The approach is therefore characterized by contextuality and relevance and a desire to engender an informed awareness of the world. While other integrative approaches, such as the interdisciplinary or multidisciplinary approaches, involve differing degrees of commitment to the structure of the disciplines (Jacobs, 1 989), the starting point of the transdisciplinary approach is the relevance and authenticity of knowledge and information that students have within their literal environment. This is reflected by the fact that the transdisciplinary curriculum addresses important intellectual and cultural issues, with focus on the human being and life.

When constructivist-based principles are embedded in the transdisciplinary framework, the curriculum also becomes characterized by dynamic, flexible system-oriented thinking and authenticity, involving creative collaboration between students and teachers in bringing attitudes, emotions, values, and knowledge to bear on learning and teaching. It also involves complex questions and questioning and the application of a rich repertoire of thinking processes and knowledge. As such, it is not a closed system of proscribed, predetermined processes intended for transmission by the teacher, linearly, from beginning to end (Brown et al., 1989, Drake, 1993, Levine, 1995, Spiro et al., 1991), but a doorway to adventure, to ultimately undefined paths, to the best possible learning and development processes for engaging both the student and the teacher.

Designing a constructive-based transdisciplinary curriculum requires open mindedness and daring on the part of teachers, together with a great degree of flexibility in handling classroom dialogue. It asks for tremendous involvement in the creation of a personal and student-driven curriculum in a seemingly unending and difficult process. The following seven characteristics describe the main attributes we regard as responsible for making the constructivist-based, transdisciplinary curriculum unique and different for teachers:

a) It is *contextual* rather than discipline-based, b) It is *conceptual* rather than content-based and therefore uses discipline-based contents and strategies as its data-bases rather than its targets, c) It is *dynamic, interactive* and *rather fuzzy* instead of well-defined and precisely planned; d) It is a *process of constructing meanings of both teachers and students,* rather than the implementation of a product (directed by a teacher) for a pre-defined end.; e) It *values and builds on diversity and* *particularity* (in terms of students, classes and teachers; thinking modes etc.) rather than accepting standardization; f) It encourages *teachers and students to use different kinds of thinking* (spontaneous, intuitive, associative, creative) in addition to rationale and systemic thinking; g) It places greater emphasis on *reflection-in-action and on teachers' and students' personal knowledge* (beliefs, attitudes, personal values) rather than focusing mainly on planning and technical rationality.

Methodology

Our analysis of the four cases is based on three different sets of data: teacher Interview, student response to open questionnaire or interview, and teacher response to a closed questionnaire. Interviews with teachers and their students were open and unstructured, and aimed to reveal feelings, thoughts and insights concerning their new experience in the CTC. We asked them how the CTC was different from their earlier experiences, what had they learned about themselves, their peers, their teacher (in the case of students), what is learning, etc.

As we had selected a random sample of only 6 students from almost every classroomfor the interviews, we asked similar questions of the entire class in the open questionnaires. The structure of the closed teacher questionnaire was inspired by the Chinn & Brewer model of knowledge restructuring. We regarded their classification as stages in a continuum and adapted the meanings of these stages to achieve c greater relevance to our study (see Figure I). We also added a dichotomous dimension to each stage, structured as a semantic differential. The data gathered from the closed questionnaires were highly consistent with those obtained from the open questionnaires and interviews. Analysis of the data from the open/unstructured and structured instruments enriched our understanding of the teachers' knowledge restructuring processes. As the analysis proceeded, we sensed that the closed questionnaire had a unique and important contribution to make as it: a) provided a clear and concise picture of the process each had undergone, b) sharpened and enlightened teachers' personal beliefs, insights, perceptions and feelings; e) provided a unique profile of each teacher's change process, and d) helped us identify the stage each teacher had reached in the restructuring change process.

A framework for analyzing teacher change and knowledge restructuring processes

We mentioned earlier that two conceptual models - Soter (1995) and Chinn & Brewer, (1993) assisted us in interpreting our observations, feelings, thoughts and actions encountered during work with the teachers. The models enabled a view of the learning process that embraced not only the teachers, but the project team as well. The reliance on more than one model enriched us both conceptually and methodologically as will be reflected in the results and discussion sections.

Our descriptive model of knowledge restructuring and teacher transformation serves to develop the Soter model in two ways. First, by a broadening of Soter's dichotomous (weak vs radical) classification of restructuring. The addition of two levels pertaining to two qualitatively different patterns reflecting the absence of knowledge restructuring: a) the unconscious resistance and b) the conscious objection. Unconscious resistance could reflect the behavioral pattern described by Chinn and Brewer (1993) as involving either the "exclusion of the new data" or the "reinterpretation of anomalous ideas". In the context of our study unconscious resistance is taken to mean the reinterpretation of an alternative curricular perspective to suit one's own (traditional or progressive) perspective.

Table (1)

A Framework for Analyzing Change and Restructuring Processes in Teachers

(Expanding Sorter's model - expansions in italics)

Radical Restructuring	Weak/Peripheral Restructuring	*Conscious Objection*	*Unconscious Resistance*
Creation of new knowledge structures (theories)	Accretion, tuning	**Abeyance: curiosity, understanding & readiness increase slightly**	Static state: no changes of knowledge structures (theories)
Efforts to resolve anomalies fail with old structures	Maintenance of old knowledge structures through accommodation	*Readiness to reassess old knowledge structures*	*Maintenance of former knowledge structures as "innovations"*
Reflective attention is high	Reflective attention is low	*Considerable reflective attention*	*No evidence of reflective attention*
Tolerance of dissonance is low	Tolerance of dissonance is high	*Tolerance of dissonance is low*	*No awareness of dissonance*
High tolerance of disequilibrium	Low tolerance of disequilibrium	*Tolerance of disequilibrium increases*	*Maximum maintenance of equilibrium*
Interactions with others are cognitive & social-based	*Interactions with others are mainly social-based*	*Interactions with others are social & emotional-based*	*Interactions with others are mainly emotional- based*

Examples of Specific Manifestation

Overall conceptions/ theories change or new ones adopted	Overall conceptions/ theories do not change	Change of theories & conceptions is rejected	"Innovative" theories & conceptions "need not change"
Existing knowledge structures change	Assimilation/ Accommodation within existing knowledge structure	Maintains old Conceptions/ theories while reassessing them	Maintenance of former concepts/ theories as "innovations"
Teacher/ student roles change	Teacher/student roles do not change	Teacher/student roles do not change	Teacher/student roles do not change
Changes in classroom organization	Classroom organization does not change significantly	Classroom organization does not change	Classroom organization does not change

Cont. Table (1)

Purposes of instruction & learning goals change significantly	Purposes of instruction & learning goals change	Purposes of instruction & learning goals not change	"Innovative" purposes of instruction & learning goals do not change
Teacher explores new ways in which advocated practices can be adopted in their own classroom	Easily accommodated aspects of advocated practices are adopted	Teacher holds the old safe & well-known practices, skeptic about new ones	Teacher holds former "innovative" & idiosyncratic practices
Interaction mainly with experts & children	Interaction with colleagues, parents & the principal	Interaction mainly with colleagues	Interaction mainly with children

The conscious objector's behavior reflects a kind of incubation (abeyance) and represents a cognitive profile with a greater potential to change. In Kuhn's (1962) description of scientific revolutions, this type of individual will perserve his or her initial beliefs and knowledge and will place discrepant ideas in abeyance, promising to deal with them at a later date. While, according to Chinn and Brewer (1993) such individuals assume that the theory they hold will someday explain the discrepant ideas, our example indicates a somewhat more optimistic cognitive and behavioral pattern.

Secondly, we have added a dimension concerning social or environmental context to Soter's original model. In particular, we added characteristics related to the various "interactions with others" that a teacher initiates, maintains and appreciates. As far as this aspect is concerned, we are in agreement with Vygotzky (1978) who highlighted the importance of social context in meeting successful change. His disposition reflects the idea that social interaction is a major force in the growth of human competence and has a significant role in activating not yet fully developed cognitive functions that allow the learner (in our case, the teacher) to perform on a higher level.

The model helped us in several different ways. It helped us organize the overall data and impressions gathered through the two years of study, aided in cross-validating our interpretations of the data and helped direct our attention to data worth exploring.

Results

Ann's Change Profile

Ann mainly teaches second and third grade and has 27 years of teaching experience. Ann's restructuring change profile reveals that at the beginning of her exposure to the CTC, she was quite curious and highly enthusiastic about it. Two years into the project, we found that her curiosity increased, yet, her enthusiasm slightly decreased. This is, however, consistent with her coming to realize that her familiarity with the CTC approach was less than she had initially thought. While the sense of vagueness regarding the new approach started to disappear, she was still not completely clear about it. While at the initial stage she felt the approach required only a minor conceptual change, after two years she acknowledged that the CTC required a major cognitive change. This was accompanied by a slight increase in her assessment of her own personal change process, which had been high right from the start.

Figure (I a) Ann

Indifference	* * * * *Curiosity
Negative attitude	* * * * *Positive attitude
Novel	* * * * *Familiar
Immature	* * * * *Ready
Fuzzy	* * * * *Clear
Minor conceptual change	* * * * *Major conceptual change
No personal change	* * * * *Personal change

Figure 1b: Betty

Indifference	* * * * *Curiosity
Negative attitude	* * * * *Positive attitude
Novel	* * * * *Familiar
Immature	* * * * *Ready
Fuzzy	* * * * * Clear
Minor conceptual change	* * * * * Major conceptual change
No personal change	* * * * *Personal change

Figure 1c: Carol

Indifference	* * * * *Curiosity
Negative attitude	* * * * * Positive attitude
Novel	* * * * *Familiar
Immature	* * * * *Ready
Fuzzy	* * * * * Clear
Minor conceptual change	* * * * * Major conceptual change
No personal change	* * * * *Personal change

Figure 1d: Carol

Indifference	* * * * *Curiosity
Negative attitude	* * * * * Positive attitude
Novel	* * * * *Familiar
Immature	* * * * *Ready
Fuzzy	* * * * * Clear
Minor conceptual change	* * * * * Major conceptual change
No personal change	* * * * *Personal change

There is an impressive degree of internal consistency in Ann's profile, indicating great coherence. Her profile presents a significant and complex change process. On the basis of Soter's model, we concluded that Ann's profile provided an example of radical knowledge restructuring. Ann showed a high level of capability when asked to reflect upon her experiences, thoughts and feelings. She, exhibited consciousness of her need to change more radically, awareness that her positive attitude toward CTC had lessened as a result of her experiences with CTC, and was aware of a major change in herself She also demonstrated a low level of tolerance to dissonance, (i.e. she showed increased curiosity while acknowledging unfamiliarity), and sustained a high tolerance to disequilibrium (a feeling of lack of clarity accompanied by a willingness to continue learning).

Ann's Voice

The specific manifestations of Ann's radical change were very clear from her interview. Asked to reflect upon her new experiences, she demonstrated a change in concepts and theories when she noted: "With *the new approach, I can't predict what will happen, or how things will develop, in the classroom...My own curricular thinking occurs during classroom lessons and is very affected by what happens there ".*

She also gave indications of an alteration in her knowledge structures, noting that: *"Whenever I taught integrative topics, I dealt mainly with contents and did not touch on important ideas, principles or concepts. This year has led me to realize and believe that young children can think at a very high level of abstraction" ".*

On the role of the teacher and the student, Ann redefined them thus: *"A teacher should listen carefully to what happens in the classroom and function at an active listener, relating to their ideas. An attentive teacher facilities thinking m children. A teacher has to let things happen, encourage open inquiries and provide opportunities research and creativity. What happened in the classroom helped* my *own thinking, I actually developed myself and and learned new things. It is exciting and challenging "*

Her statements regarding new and desired instructional and educational processes are most impressive and can be summarized in the following excerpts from her interview:

"Meaningful learning needs to be experiential, challenging and true to life (meaning authentic and relevant) and should be action related. I visualize a new school with a huge garden, with pats and plants and exploration centers all over the place. kids from different grade levels learn together with newspapers, books, computers and experts whom students can easily approach. "

Ann's view of the process of change is reflected in her conception of the teacher in a learning capacity:

"We the teachers need to become a learning team. Learning should be experiential, challenging, authentic and active; like life"

Quite often Ann referred to the way her social context affected her: When describing her own learning process, she referred to her significant interaction others: *"the kids stimulated me fee! Very enthusiastic. They challenged me and gave me the strength to keep going. I felt quite lonely and didn't act any input from my colleagues, In the main, I looked to you (experts) for comment "*

Ann's Students' Voice

The data obtained from Ann's students via an open questionnaire serve to complement her own verbal testimony of radical change. When asked them whether they had discovered anything new about themselves, their peers or their teacher, they said : " *discovered that when n look at something I can see very different and new things. I learned that I can do much more than I thought. I learned that I can do complex and difficult things,,. There were things that I knew (from outside school) and suddenly, If found we were talking about it in school ".*

When students were asked what they had learned about their peers they said: *"kid can do more than adults think they can. I discovered that everyone is different: one is sensitive, one is enthusiastic, one loves, one is quiet, one suffers from allergies, one is clean. Each one has completely different ideas ".* Referring to their teacher they said: *"Yes, she learns prom us. She is learning with us, she likes to work with us, a teacher* *also learns, she can teach in a way that is not familiar to me, she helps us discover things".* .

When asked to describe in what way learning through the transdisciplinary web is different from the way they learn other subjects they noted: *"we proposed the questions and we did nor have books, the teacher did not know in advance what would we learn while m other subjects she always knows, we participated in managing the lesson, we brought up questions and ideas".*

Summary

Ann's profile is an example of radical knowledge restructuring. It reflects open-mindedness, dynamic perceptions and creativity. This teacher underwent a radical change process wherein new knowledge structures were established, changes in conceptions and theories took place, new ways to function were explored, and through the conscious acceptance of change (with minor modifications) (Chine & Brewer, 1993, Soter, 1995). This teacher shows that a process of a radical restructuring is not a naive process. There is no simple move from a negative attitude to a positive one, nor from unfamiliarity with the new approach to a total familiarity with it. Her profile illustrates a complex process and highlights some of the difficulties involved, including the need to go through a major personal change. Ann displays a high level of consciousness of the processes involved in her change and demonstrates much coherence in her statements.

Ann feels quite lonely and receives little or no assistance from her colleagues Her meaningful interactions are with students and outside curriculum experts. These interactions are attentive to authentic learning of her students and herself. The data obtained from Ann's students served to cross- validate the data from her interview. From both we may infer that the learning processes experienced in Ann's classroom are meaningful, experiential and deep. Her radical knowledge restructuring and performance is evident from her students understanding the significant differences between their learning via the CTC and their regular classes, and the testimonies of their insights. Ann's interactions with both students and experts are particularly meaningful as they are cognitive-based and therefore enhance the learning processes of all involved. This ensures that the process is dynamic, and serves as a mechanism for continuous self-development. Clearly, Ann is a both teacher as well as a student. Teaching for her is one more stimulus which facilitates a meaningful learning process.

Educators would like to see teachers as artists (Eisner,1991). We believe that Ann exemplifies this ideal type of teacher. Indeed, both Soter and Chinn & Brewer maintain that the apex of a restructuring, and change process is when a teacher is capable of functioning autonomously and exploring new strategies and/or consciously accepts new information and modifies some of its aspects,.

Betty's change profile

Betty is a teacher with 32 years experience, and mainly teaches 5th and 6th grade. Her initial profile reflects an ambivalent attitude toward the new curricular conception. At first she felt highly enthusiastic even though she did not feel ready for the CTC approach. Two years into the study, she feels more ready for the CTC demands and her attitude is more positive. She feels she needs only make minor changes in her conception and that the issues at stake are clearer for her. Her sense of personal change is consistent with other manifestations of change. However, her profile does not reflect a high level of consciousness of the fact that the new curriculum approach requires a major conceptual change. Betty's profile indicates low level reflective processes, high tolerance to dissonance (she is clear about the approach, ready to act but also unclear about it), and a low level of tolerance for disequilibrium (things are clear now and she does not require to make dramatic changes In her current approach). We view Betty's knowledge change profile as an example of a change process that is not simple, which presents low awareness to a need for a radical conceptual change. According to Soter's model, Betty represents a teacher who keeps old knowledge structures while adapting specific instructional procedures (tunning & accretion), namely a profile indicating a peripheral restructuring change.

Betty's Voice

We found support for the fact that Betty had failed to change her basic concepts and principles: *"I reverted to old working habits when I had to teach subject matter contents. Learning is the acquisition of knowledge ....I enjoyed it more when I was expected to use prescribed teaching materials and not just follow with my thoughts without any real idea of the direction I was supposed to take... "*

She did however manage to assimilate new data into existing structures as we see from her comment: *"in the past I thought that there are subject to cover, that there is a rigid structure namely a beginning middle and end. Today it is different. I think differently, Boundaries have been broken down...I believe that one needs to plan, have a framework, a path, but that these should have a flexibility that allows students ideas to be incorporated ".*

In Betty's eyes, the transdisciplinary curriculum, class organization and teachers' roles did not changed much: *"the kids would get on with it by themselves, and I would think, 'It's no good, even dangerous',... when I don 't know how the lesson isn't going to end, I get a feeling of helplessness, and I have to stop and then start again in a more structured way. I had great difficulties getting rid of the subject' areas (disciplines), I . was afraid kids would lose much because of this new approach, I realized I was wrong.. Once I felt I knew everything, I was almost Cod, today it 's different, the picture has changed, I began learning from my students. They brought new kinds of knewledge into the classroom".*

Based on what Betty said, she had changed in terms of having acquired fresh conceptions of educational, learning and instruction goals: *"We are capable of enhancing students' thinking we actually did* it *it is important Jo let students develop their thinking in different directions. there is no single answer - there are several, many,..the important educational skills are: ability to work with information and resources; creative writing; reading skills for the sake of one's 's own development, soul and imagination; ability to communicate and become a good listener".*

She also adopted some of the suggested curricular practices as she noted: *" We dealt with dilemmas: some' students read, some tried to come up with ideas, some questioned written information and expressed their own opinions in writing. I feel good now and the subject matter teacher' told me that students are referring in their lessons to the concepts they have learned ".*

In her interview, Betty expressed great satisfaction with thsocial consequences of the new approach, reflected in information gleaned from both her students and their parents: *"One gairl, who had severe leaning difficulties began reading newspapers, she wrote to people and interviewed them and worked seriously. When students began bringing newspapers to class we started having good conversations which greatly affected the* *social relationships in the classroom.. Parents started calling me and complementing me on the activities we are doing in class "*

Betty's Students' Voice

Betty's students supported our interpretation of Betty's peripheral nature of knowledge restructuring when they said: *"the teacher had changed, the school principal probably laugh' her. At first she had problems and was confused. We did not know what to do either Later on, each student chose a project about a topic he likes and really enjoyed i/. We had to think about ideas and problems that are important to us. But we needed a lot of learning materials otherwise the lessons were bonny. We did the projects and the teacher helped us. In the past we did not have these kinds of projects. We enjoyed learning this way. It is fun, and it's easy because you know why you are doing the work. It feels more meaningful ".*

When asked about themselves, students noted: *"It felt like we carried on learning even after the lesson was over, learning spilled over into our every day life.. We learned to think differently".*

Summary

Betty's profile represents the peripheral restructuring prototype. It is characterized by dynamic development, involving the assimilation of new knowledge structures into existing structures in a way that does not alter basic concepts and theories. Betty is aware of how positively her own change affected her students, the classroom environment, students' parents and the level of her principal's satisfaction. Because her interactions with others are socially-oriented, and not cognitively driven, she is most affected by social feedback, which reinforces her sense that the change she is experiencing is positive and motivates her to carry on learning. This feedback reduces her need for introspection and creates a good sense of equilibrium, enabling her to tolerate a high level of dissonance in her statements.

Betty lacks sensitivity of cognitive feedback, and is not completely conscious of the fact that her new knowledge, though refreshing, has not been accommodated but serves as an additional way to enhance traditional learning ideas. For example: If the core idea of the new approach maintains that personal learning and developmental processes form a significant goal, and that subject matter contents merely provide a means for achieving other goals, for Betty, the opposite is true the contents are the principle and the use of concepts, themes, dilemmas etc. are simply channels for learning subject matter. According to Chinn and Brewer, while peripheral change is an advanced form of response to new knowledge, it is still not the most desired response. In the case of peripheral change, knowledge restructuring remains weak and quite shallow (Soter, 1995). The question to be asked here is: "Is there a way of maintaining the change process so that it flows in the direction of a more profound internalization of new conceptions and which, in turn leads to a radical degree restructuring'?. Radical change requires reflective processes, a sense of dissatisfaction, to collaborate on a cognitive basis and an ability to tolerate situations of disequilibrium. Betty is not at this stage and, until she is, we can't expect her to undergo any radical degree of knowledge restructuring.

302

Carol's change profile

Carol has been teaching for 24 years and typically teaches in third and fourth grades. Her profile represents a reserved attitude toward the CTC. A minor change seem to have occurred during the past two years, which may suggest that something is happening to her. She is still mildly positive and still has the same feeling of familiarity with the new approach, which may explain her low level of curiosity. Nevertheless, there is an indication of an increase in her feeling of readiness to deal with, and try and understand, the new curriculum approach. This seems consistent with the slight increase in curiosity. She is clearly aware of the need for a radical conceptual change. This awareness helps to explain her objection to the new curriculum approach. In general the profile seems to represent a mild degree of reservation regarding the new approach, coupled with a strong sense of awareness of this. Carol is conscious of the need for her conceptions to change, and is aware of her own personal change and of her objection to the approach. She has low degree of tolerance to dissonance (her statements are quite consistent) and a growth in tolerance to disequilibrium (although the approach is new she feels more ready to work with it), along with better clarity and a higher curiosity; she seems to have changed a little, in spite of her reservations.

Carols' Voice

Carol's interview supported our interpretation of her conscious objection profile. At this point in time she is resistant to changing her conceptions and theories: *"At first I could not bring myself to deal with the new approach. I needed time to listen, to become acquainted with it and understand it. To internalize itI can only act when I feel confident about something. I was very much against it because you emphasized that it is a flexible process and that the teacher can't predict what it's going to be like in the classroom That bothered me a lot. I was very frustrated because I used to work in an open school and I always used to aim for excellence. Until now I fell I was very open in my approach, and then suddenly I realized that I 'm considered to be very closed in my educational approach."*

Although Carol clings to her old knowledge structures, she seems willing to reassess them: "I *decided I needed to work on myself because this approach had something good to offer. I heard other teachers talking about the great things that were happening in their classes, so I started getting interested myself. I had a look at the learning materials my colleagues were using and couldn't understood any of it. But once I saw the whole picture, I began to understand. I realized that within this unstructured paradigm there is some order and that everything leads to* something *new and that all things are related"*

We see from her interview that, as yet, no changes have occurred in Carol's perception of the role of the teacher and the student: *"In one meeting a teacher said she sees a symmetry between a child and a teacher, I don't. an adult, I need to decide what's good for a child, We know what a child needs to learn,, and to acquire therefore the choice is mine. I listen to kids and to the low achievers in particular because they are special but it is difficult."*

Neither has Carol changed her perception of the educational process and the goals learning and instruction: I *can't even start to think of myself as a curriculum planner--I am not there yet. I am willing to see that a child can take some par' in planning a curriculum, but only in a very minor role."*

Carol keeps resorting to her own tried and tested, "safe" educational approaches: "I *am a very organized person and had problems with the vagueness of the new approach. I need things to be organized. I hearing so many objections frontal lessons and I sense that the new approach calls for a lot of class discussion which is frontal bud it can also be very fruitful when discussion keeps developing and that is great it happens to me when I teach a subject area. "*

She relates to her peers, noting how frustrated she feels and how much help she needs, mainly from peers whom she sees handling the new approach well: *"Suddenly, for the first time as an experienced teacher I faced an unknown situation, I had no confidence at all. I felt needed to observe other teachers' classes, confident teachers.* In *my classroom trials, with the help of a colleague, I found I was impressed with what the kids could do, and how they blossomed, so I opened up as well. Its the chicken-egg situation. ".*

The data seem to show that Carol is fully aware of her own objections (mainly caused by her self perception as an innovative and open minded teacher). The CTC approach had mirrored back to her that she is "closed" to changes. Her explicit objections are both cognitively and emotionally based. Only the success and enthusiasm shown by other teachers motivated her to examine the new approach more closely, but she was restrained by her lack of confidence. Although Carol did not achieve much with her class, we feel this is a case for discussing delayed change, or incubation, due to Carol's willingness to consider the new ideas and have a go at experimentation She is aware that her students' difficulties reflect her own, and has begun express an amazement at her students capacity to think deeply and generate good quality ideas. Although she is willing to try working with a curriculum driven by concepts and themes, she still does not believe that students ought to share in the curriculum planning process. She looks to colleagues or experts for intensive training and support, indicating a willing to experiment further.

Summary

If "A journey of a thousand miles begins with a small step" then Carol's step represents a willingness to reassess her instructional practices. The profile representing conscious objection to change is refereed to, in Chinn & Brewer's scheme, as abeyance. Embedded in this prototype is a certain level of curiosity about the new area of knowledge presented, and some kind of readiness to reexamine existing knowledge. We see that this particular teacher takes conventional and safe routes, thus ensuring that habitual norms remain intact. She is aware however that any acceptance of the new approach will demand major conceptual and radical personal change. Such change is likely to occur when the new knowledge area becomes clearer and when there is a feeling that consensual social boundaries will not have to be crossed. According to Chinn and Brewer, abeyance lies somewhere between ignoring new (anomalous) data and mindfully accepting the data, namely the radical restructuring of knowledge. It can be compared to perching on edge' - feeling more positive than negative about the new knowledge area in question - but experiencing a good deal of uncertainty, which prevents the individual from "jumping into the water". Our question is: "What can be done to encourage the teacher in this situation to develop further?"

A relatively high level of reflective processes, low tolerance to dissonance and a capacity to tolerate disequilibrium - the three principle factors in the radical restructuring process - have the potential to create a dynamic developmental process, if accompanied by supportive social interactions. However, the fact that interactions with peers only (not with children or experts) are based on social and emotional grounds, and not necessarily on any cognitive basis, may inhibit any significant step toward a radical restructuring of knowledge. If we risk the prediction *of* a probable path of Carol's development, we would hazard that such a process would first go through a peripheral restructuring stage, that is, assimilating new knowledge into old, accepted and safe, structures. Carol is an example which confirms Strike & Posner's proposition that when epistemological beliefs arc deep and strong, a teacher or an individual is more likely to assimilate new information than to accommodate it.

Diana's change profile

Diana typically teaches first to third grade classes, and has 16 years teaching experience in Israel and the USA. Diana's profiles demonstrates no change in either her knowledge or her attitudes. All of her responses indicate an absolute resistance to a change. Although she is curious, feels ready and familiar with the CTC approach, she also senses vagueness along with a low need for personal change. Her profile demonstrates that she does not believe there is a major conceptual change she has to go through, only a minor one. In fact there are internal contradictions in her profile. For example: her indication of being highly curious and simultaneously that she is highly familiar with the approach. Also, the indication that she is familiar with the approach and yet still finds it vague. Theoretically, it is expected that increased clarity would follow an experience with the approach, and that personal change would follow. Alternatively, a sense of vagueness would lead to an awareness that there is a need for a deeper conceptual change.

Diana's profile represents a static situation which implies that the training and the experiences had not affected her so far, probably due to the fact that Diana strongly believes that there is nothing new for her to learn. There are no indications in her profile of any reflective processes (no awareness of contradictory feelings or of a need to change), no awareness of existing dissonance, and a strong, manifestation of equilibrium (expressed feelings of familiarity, readiness and being positive, consistent with feelings of a need for minor personal change and which block the perception of a need for more drastic conceptual change).

Diana's Voice

Diana's interview indicates that she holds innovative concepts and ideas regarding, educational issues: 'Once we knew what to expect, everything was written, it was easy. Now we are on the alert. We have to go with the children. There is a need for more flexibility. I don 't believe much in a curriculum because my perspective Is to relate to the world. I think a teacher needs to sit with the children and plan the curriculum for the year. We need criteria: we need to *decide what's important for us what interest us may be look at at existing and take take things from those program. Thinking is like a flying bird flying in any direction and at different heights.* "

Diana clings to her existing knowledge structures which are considered innovative in her school: *"L earning means knowing that there are unsettled things. That we don't know it all. I don't try to provide solutions. Maybe my answers arc wrong too. One should not hold students back. We need to give each child every opportunities to think in every possible directions. We should evaluate children on their originality world knowledge development in ability to ask questions increased curiosity transfer attention* *to others and consideration. In school we usually do not see the child as a whole we only tend Jo know part of a child. Its only a superficial image of the child. "*

Her perceptions of teachers' and students' roles haven't changed: *"There are so many ways of teaching. I go by my intuition. I see myself as a guide helping students. I always worded this way thinking: "the kids would discover it" . A teacher is a guide A friend and a policeman. Such a role is difficult because L have to solve all sorts of social problems. I feel a bit like a policeman. It is important for me that every child has a chance to state his or her opinion because otherwise some kids might get lost ".*

Her instructional and learning goals are innovative as she noted: *"We have to incorporate daily events into the subject areas we need to show children that in life there are different circles but all of them are interconnected. Parents and children need to learn together".*

According to her interview data, Diana performed in class in ways that are familiar to her. Some of her approaches were innovative and unique: "I *never answer a question We write questions and we all answer them. I appreciate the questions more than the answer I don't mind if they don't answer as long as they ask questions. I tell the kids that we don't always find answers to question, all of them arc hypothetical I try hard to give interesting lessons When working on concepts had difficulties. The kids enjoyed it but I did not really get into it. "*

This teacher also seems to interact with her environment on an emotional level: "I *am a lone wolf. I know that am different "creatures here in school and to have different ideas is diffbecause I am considered a snob, But I believe in" what I do and I can't and won't compromise. I enjoy learning and developing in my own way. I am afraid of others because I feel I am different and I have a problem with this. "*

Diana's Students' voice

Diana's students verified her statements in their responses to our question regarding what they learned about their teacher: "*She likes teaching in a different way to the way other teachers are teaching. The way she teacher is fun I found out that my teacher likes it when we do lots of different things: when we explore and check into thing. with her only gives us the directions. She likes teaching us the way they teach in university ".*

Diana represents a teacher who is certain that she operates in a highly innovative way which suits her personality and therefore there is nothing for her to learn from others. Thus, she blocks any potential change It is possible that she overgeneralized the similarity between the approach she already uses and the CTC approach, which might explain her inability to see the differences between the two. Her perceptions regarding learning generally fit in with the constructivistic approach. She is open towards her students, she respects and values them. She places great emphasis on incorporating real life (relevant) issues into her curricular considerations. However, she lacks an understanding of the rationale behind the transdisciplinary approach which use "major ideas", themes or concepts as the basis of the curriculum.

Summary

The unconscious resistant type - Diana - is characterized by a stable knowledge structure profile. She is convinced that she already knows the kind of approach used by CTC. She did not realize the similarities and the differences between her existing knowledge structures and those implicit in the new approach. To use Chinn & Brewer's (1993) terminology, she either reinterprets the new approach and persists in her old knowledge structures, or else dismisses the data as if it does not concern her. A "lone wolf", who finds difficulty in cooperating with others, she is radical in her thinking and actions, and manifests a strong will to go for the extreme, as long as it is her, unique and innovative ideas.

Her enthusiasm over unconventional approaches and her motivation to act upon them, bring her close to a style reminiscent of radical change: she is creative, intelligent, she cares about things, isn't afraid to break the rules and is very lonely at school, mainly because she likes work according to her personal beliefs. She has a strong personal vision - one of the four characteristics Fullan (1993) mentions as prerequisites for change. However, we should differentiate between *radical restructuring* of knowledge and a *radical way of acting* with no signs of knowledge restructuring. While the former (radical restructuring) involves a change in perceptions and actions which goes hand in hand with cognitive and social interactions with others, a radical way of acting gives rise to a sense of great loneliness. Indeed, Diana indicates a high level of emotional involvement with her students and no interactions with experts or peers. Moreover, she explicitly mentions that school is not a place for her to learn, the university is.

It is likely that if Diana would have realized the differences between the two approaches (her personal approach and CTC), a change could have occur for her. For a change to occur she needs to reflect upon her perceptions and actions which also requires a sense dissatisfaction with what exists (Strike & Posner, 1982) and engagements in meaningful interactions with others (Vygotsky, 1978). Inquiry according to Pasacale (1990) is the" engine of vitality and self-renewal". Since these characteristics are lacking in Diana's prototype, at least at this point in time, she is trapped in a viscous circle. We view her profile as being the most problematic, and even dangerous, in terms of the process of knowledge restructuring. This is because Diana is not aware of the fact that she is reinterpreting the new knowledge, she tends to resist to change, and also, and most disturbing, because she does not see herself a learner in her own school.

Discussion

Our study aimed to explore the cognitive change processes of four teachers following two years of experience with a new approach to curriculum, learning and instruction. One of the most interesting results of this study is the manifestation of the unique and idiosyncratic processes experienced by each teacher. In this respect our results provide support for Soter's (1995) conclusion that even in the most advanced group-based team oriented teacher training, every single teacher goes through a unique and a personal process. This is a process of knowledge restructuring involving both the assimilation and accommodation of old and familiar knowledge. As such, teachers' learning is no different from children's' learning.

Our results support constructivist concepts regarding learning, and suggests that knowledge is not simply transmitted from expert to novice, but it is a personal process of growth that builds from within. Such a process involves a variety of factors--personal, social; and cultural-- that are interconnected in a complex network which is not always predictable. Even though this does not represent new idea, our results strongly support the fact that the use of "knowledge transmission" methods is irrelevant, although they might still be quite popular in school instruction and teachers' training programs. Thus, the real name of the game is *learning*, rather than *instruction*. Allowing learning happen is the desired goal. This is the process professional and artistic teachers should aimed at for their students and for themselves. It is also the process that teacher trainers should strive for their students.

The profiles of two teachers- Ann and Diana-- both of whom are considered innovative in their teaching, reflect significant differences in their perception of learning. Ann and Diana are both very independent teachers, unconventional, and unafraid to cross the lines and acting on their own beliefs. This superficial resemblance between the two, may mislead others: colleagues, parents, principal, students and sometimes even experts. There is a need for a professional and experienced eye, and a thorough and sensitive analysis in order to see the differences between the two. In this research we managed to expose the qualitatively vast differences between the two. Almost amazingly Diana's profile shows "zero learning" while in Ann's case there is a significant and complex learning process. That is, one teacher does not learn and in fact differentiates between her instructional role (at school) and being a learner (at the university), whereas for Ann *instruction is in itself learning process.*

Our study does not support Soter's claims that the principal and colleagues represent the most influential factors in teachers' learning. We found in this study, that different teachers prefer different kinds of interaction with others. To examine how these interactions affect the knowledge restructuring process, we suggested to examine *two* dimensions: the teacher's preference for interaction, and the kinds of interactions that are established. Our results demonstrate that the teacher's interactions which contributed most significantly to the learning process were those between the experts and the children. In that regard, the teacher may be regarded as being one side of a triangle whose learning is affected by the new knowledge which the expert represents on the one hand, and by students' authentic learning processes, on the other. The teacher who radically restructured her knowledge indicated that these two sources were most significant for her. One possible explanation for this could be that a teacher who applies constructive-based principles of learning and instruction is more attentive and sensitive to internal learning processes, both her own and that of her students. She looks for challenging stimuli and resources and takes advantages of the opportunitithey provide. As long as children and experts satisfy her needs, she does not feel a need for interaction with her peers. If we try to rank the quality of the restructuring process based on the teachers interactions, we can say that at the apex stands the teacher who appreciates and maintains interactions mainly with experts and children, at the middle, are those teachers who maintain interactions with peers, parents and the principal, and finally, at the bottom, are those who had very few interactions, if any.

We also found that differences exist in the quality of these interactions. The data reveals three different finds of interactions: cognitive-based, socially-based and emotionally-based. The kinds of interactions that characterized the teacher who had radically restructured her knowledge were both intellectual and social. The cognitive-intellectual aspect seems to be a necessary condition for a significant restructuring process, although may not be a sufficient condition. The combination of a socially—based interaction occurring between the teacher, parents, peers and principal was apparent in teachers located between the peripheral restructuring and the abeyance types. Interestingly, an emotionally-based interaction mainly with children characterizes the teacher who had not undergone a knowledge restructuring process and who we classed as the unconscious resistant type.

Our research seems to suggest that two important factors affect teachers' learning in the context of a new curriculum approach: 1) teachers' degree of awareness to their learning processes, including reflective processes and tolerance to dissonance and disequillirium; and b) the ability to interact with both experts and children on a cognitive, social and emotional basis. These conclusions are aligned with vhat learning theorists and organizational theorists have taught us regarding conditions of meaningful learing People learn best through active involvement and through thinking about and becoming articulated about, what they have learned (Dewey, 1933, Schon, 1987, Lieberman, 1995). Teachers' knowledge emerges from their actions and their reflections concerning those actions.

It is worth mentioning here that our research provides a picture of four teachers undergoing, a new learing experience, a process which began two years ago and not yet finished We are aware that unexpected developments may occur since our data, although rich and varied, do not capture hidden processes that are not yet evident. We are therefore prepared to continue studying this interesting process, in the belief that the processes we can expect to face in the future, will enrich not only teachers' and the childrens' learning, but our own learning as well.

References

Atkinson, R.C., & Shiffrin, R.M. (1968). Human memory: A proposed system and its control of mechanisms. In K.W.Spence & J.T. Spence (eds,), The psychology of learning and motivation: Advances in research and theory (vol2, pp.486-522). New York: Academic.

Ben-Peretz, M. (1994). Teachers as curriculum -makers, in T.Husen and T.N. Postlethwaite (eds.). The International Encyclopedia of Education, 2nd edition, Elservier Science I,td. The Boulevard, Langford Lane, England,

Brown, J.S., Collins, A. & Duguid, P. (1989). Situated Cognition and the Culture of Learning, Educational Researcher, I8, 32-42

Chine, C.A., & Brewer, W. F. (1993). The role of anomalous data in knowledge acquisition: A theoretical framework and implications for science instruction, Review of Educational Research, 63(1), 1-50.

Clark, C. (1988). Teacher preparation: Contributions of research on teacher thinking, Educational Researcher, 512.

Clark, C. M., & Peterson, P. 1. (1986). Teachers' thought processes. in: Handbook of Research on Teaching, 3 rd edition, edited by M.C. Wittrock. New York: Macmillan.

Cohen, D.K. et al (1990) Effects of state-level reform on elementary school mathematics curriculum on classroom practice. Final Report U.S. Department of education,Michigan State University, College Education Center for the Learning and teaching of elementary subjects and National center for research on teacher education.

Dewey J. (1933). How we think . Boston: D.C. Health

Darling-Hammond, L. & McLaughlin, M. (1995). Policies That Support Professional Development in an Era of Reform, Phi Delta kappan, April, 597-604

Drake, S.M. (1993). Three Frameworks, Planning Integrated Curriculum, The Call to Adventure, Association for Supervision and Curriculum Development, Alexandria Virginia.

Eisner, E, (1991). The enlightened eye, Macmillan Inc; New York.

Fullan, M.G. (1993). Why teachers must become a change agents. Educational Leadership, 50(6), 12-17.

Humphreys, W. C. (1968) Anomalies and scientific theories. San Fransisco: Freeman, Cooper and Company.

Jacobs, H. H. (1989). Interdisciplinary Curriculum: Design and Implementation, Association for Supervision and Curriculum Development.

Kagan, D.M. (1990). Ways of evaluating teacher cognition: Inferences concerning the Goldilocks principle., Review of Educational Research, 60(3), 419469.

Kennedy, W., Ddoyle, C., Rose, A., & Singh, A.(1995). Teaching internships: A reflective practice. in Hoz, , R and Silberstein M. (eds.). Partnerships of schools and institutes of higher education in teacher development, Ben Curion University of the Negev Press.

Kuhn, T. S. (1962). The structure of scientific revolutions. Chicago: University of Chicago Press.

Levine, T & Nevo, Y (1996). School as a mirror of reality: Toward a new curriculum perception as an integrative and a dynamic learning space. Position paper submitted to the Israeli Ministry of Education & Culture; Tel Aviv University, School of Educations

Levine, T., Nevo, Y., Luttzzati, S., & Tal, P. (in press) Exposing teachers to the transdisciplinary curriculum: A channel for facilitating curricular thinking. Proceedings of the Second International Conference on Teacher Education: Stability, Evolution and Revolution, Mofet Institute, Tel Aviv, Israel.

Levine, T. (1995). Curriculum in the technological era. in D. Chen (ed.). Education toward the 21th century, Ramot, Tel Aviv University Press.

Lieberman, A. (1995). Practices that support development, Phi Delta Kappan, April. 591-596.

Pascale, P (1990). Managing on the edge. New York: Touchstone.

Prawat, R. S. (1992). Teachers'beliefs about teaching and learning: A constructivist perspective. America journal of Education, 100(3), 354-395.

Rumelhart, D. E., & Norman, D. A.(1981) Zaccretation, tunning and restructuring: Three modes of learning in J.W. Cotton and R. Klatzky (eds.), Semantic facctors in cognition (pp.37-60). Hillsdale, NJ: Erlbaum.

schon, D. A. (1987). Educating the reflective practitioner. San Francisco,CA: Jossey-Bass.

Soter A. O ., 1995. Teacher learning over time: Accommodations, reconceptualizations and radical transformations, in Hoz, R and Silberstein M. (eds.). partnerships of schools and institutes of higher education in teacher development, Ben Gurion University of the Negev Press.

Spiro, R.J., Feltovich, P.J., Jacobson, M.J. & Coulson, R.I., 1991, Cognitive Flexibility, Constructivism, and Hypertext: Random Access Instruction for Advanced Knowledge Acquisition in III-Structured Domains, Educational Technology, May, 24-33.

Strauss, S. (1993). Teachers' Pedagogical Content Knowledge About Children's' Minds and Learning: Implications for Teacher Education, Educational Psychologist, 28(3), 279-290.

Strike, K., & Posner, G., 1982. Conceptual change and science teaching, European Journal of Science Education, 4, (231240)

Vanderberghe, R (1984). Teacher's role in educational change, British Journal of In-Service Education, 11(1),14-25.

Vosniadou, S., & Brewer, W. F. (1987) Theories of knowledge restructuring in development, Review of Educational Research, 57(1), 51-07.

Vygotsky L.S., 1978, Mind in Society:, in M. Cole, V. John-Steiner, S. Scribner and Souberman (Eds.). The development of higher psychological processes, Cambridge, MA Harvard University Press.

Zitlow, C. S. (1990) To think aboutwhat I think: Inquiry and involvement. In G. Hawser and A. Soter (eds.), On literacy and its teaching: Issues in English Education. Albany, NY: The state university of New York Press, pp,50-67.

VALUING THEORIES OF ACTION THROUGH CASE RESEARCH METHODS AND THE EXPERIENTIAL LEARNING PROCESS

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USA

BACKGROUND

School reform continues to be a global issue. Most nations are involved in the process of determining ways to strengthen the capabilities of people to cope with the dynamics of change. The changes created by the growth of technology to govern daily activities continues to push the need for a more literate society to higher levels.

Educational leaders are forced to identify ways to reform the academic system to meet the challenges of a rapid growth in the production and utilization of knowledge. Those educational systems which do not adapt to change and continue to see change as a constant will be unable to compete in a society that has adopted change as a "way of life".

The development of teachers in present educational systems is based on sound theories of practice that have been found to be valuable I setting standards of quality. These theories of professional practice are based on criteria such as "generality, relevance, consistency, completeness, testability, centrality and simplicity...theories are vehicles for explanation, prediction or control" (Argyris, 1990). Theories with these criteria may be described as Espoused Theories.

Espoused Theories work well as long as the variables remain nearly the same in similar situations. if the variables would change and the user has learned to respond to the unchanged variables, how is the learner to behave in a situation that is now unique, incongruent with prevailing practice and at odds with current values? The new situation requires the learner to put a new theory of action into place, one that has not been tested but one developed from "experiences in thinking of options." This behavior, if adopted, may or may not solve the dilemma. However, during a period of reflection, the learner is able to assess the situation for future use. With some testing of the Theory in Action, this could become an Espoused Theory.

Present day school reform plans are designed to focus on changes based on Espoused Theories and those elements, which can be controlled by internal forces. These elements include learners teachers, administrators, ancillary staff and, to some extent, advisory and policy boards/committees as well as physical and fiscal resources. The Espoused Theories which allow administrative leaders to select controllable elements are used as part of school reform with little consideration given to the fact that the dynamics of the school environment requires practices that are derived from Theories of Action.

In general, educators who become competent in developing options for action are more likely to be able to adapt to the rapid changes in the classroom.

CURRENT STATE OF AFFAIRS

In this paper, the element which is described as the focus of change is the teacher during the pre-service and in-service period. Attention is paid to his or her ability to develop a "bag of options" which can be utilized when a Theory of Action is required.

Men and women who enter the teaching field are selected for their ability to be a change agent in the lives of the children and adults with whom they will interact. These men and women are provided with a strong academic background of course work during their pre-service period along with an opportunity to "observe the mater teacher and practice teaching in a classroom under the supervision of a master". The process is very well structured so that standards of practice can be measured in a manner which yields valid and reliable data for comparison purposes. The premise is that if teachers are well educated and have good pre-service and in-service training, students are more likely to learn at or above grade level, given that all other controllable elements remain stable.

Another premise is that a practice teacher who observes a master teacher who models good behavior will be able to use that modeled behavior to handle a similar situation in a new classroom. The truth is that an uncontrollable factor exists in the process and that is the culture of the teacher-to-be and the culture of the master teacher as well as the learners within a given classroom situation. The extent to which the practice teacher or in-service teacher is able to understand the cultural factors in which a given behavior is being considered in the situation by the master teacher is the degree to which such teachers are able to transfer elements of the modeled behavior to their own classrooms.

Currently, practice teachers observe the behavior and they may spend some time in "reflection" with the master teacher. This is a time consuming process. Few teachers are able to allocate "time for reflection" for themselves and even less time for the practice teacher.

DESIRED STATE OF AFFAIRS

A desired state of affairs is one in which all teachers are assisted to develop skills in building options for practice. Case research studies might be used along with simulations to determine the options for selecting a behavior to practice in a given situation. All such cases and simulations would include a clear description of cultural factors which need to be considered before a behavior is exhibited. This training would occur in what is known as the practice teaching coursed and would be part of the reflection period in any observations and demonstration teaching sessions. This desired state of affairs would call for a reform in the practice teaching and demonstration courses as well as in the in-service workshops. Interactive learning would be used as a process as much as the discussion of getting. The process would be case research development, case presentation with out " questions to be answered at the end of the case", demonstration of options and practice of the various options with a period of reflection. The emphasis is on taking theory into practice. It is to develop competencies to practice not "a" way but many ways.

PLAN OF ACTION

The following plan of action was developed to test the possibility of creating a learning environment for adults as educators in which "really situations in professional practice" could be utilized to create a "bag of options" from which teachers as learners could explore the creation of Theories of Action. The plan includes the use of case research studies and an experiential learning process.

DESIGNING CASE RESEARCH STUDIES

Case studies have been found to be a valuable tool in the teaching of men and women entering into a professional field of practice. The case provides a scenario of narrative data in which a problem is to be resolved by the reader. At the end of the case, a series of questions are listed which encourages the learners to think of ways to resolve the problem. They are often asked first to identify the problem. Case studies will usually generate more data than is able to be processed at any one period of time. Learners end up with a "right solution". Everyone feels good because have been able to solve the "x" in the equation. The concern is to what extent are the learners able to take this "solution" into the field and practice it? Therefore, the case research studies proposed in this plan differs from the above one in its purpose and presentation style.

The purpose of the case research study is to provide learners with a dilemma in which various options might be suggested as a way to resolve the dilemma. There is no right solution but there are "better" choices and a linear list of possible situations are developed if variables change at any time.

The learner is engaged in a critical thinking process that strengthens one's ability to look at a broader range of experiences in any given situation. The practice of this behavior in role plays and simulatassists the learners to create a "bag of options" that may be used and modified as needed. Learners who do the research to develop real cases become better at the development of options and they learn to be aware of value-laden data and bias information. They learn to "see" multiple-dilemmas and to sort out the ones which are useful for the present situation.

Case research studies may be used to clarify issues related to subject matter as well as to the teaching process. One instructor used the case research study to introduce learners to the understanding of squares. He gave them a picture with 16 squares in a square, then he put 16 squares on the table of the students who were in groups of 5. He gave the case of a company needing to know why they had received so many extra boxes (squares) over 100 in the office last month. the manager had given a team of 5 employees the task of ordering the boxes, acting out the role of the manager, the teacher told students to tell him "how many squares does the team see? The learners said numbers from 16 to 30. The teacher saw the dilemma and the students discussed the options. The numbers varied depending on the perspective of the team and how they saw themselves as a team. The option could have been as high as infinity.

In the case research study, there are no questions to guide the learner towards discussion at the end of the scenario. At this point, the instructor begins to facilitate the process of "drawing out" the options by utilizing an Experiential learning Process (Pffeffier and Jones, 1993).

IMPLEMENTING AN EXPERIENTIAL LEARNING PROCESS (ELP)

The ELP (Pffeffier, 1990) is an instruction strategy utilized in the training and development of adults in business and industry. It is used in public and private educational systems, also. the use as describe in this paper is one adopted by the author for demonstration and practice by professional practitioners in a graduate degree program in adult education (Malone, 1996).

The ELP has five components. They include:

The Experience - This is where the case study is introduced. However, the experience be a role play or simulation and it some cases it might be a well delivered lecture

Publishing - This is a time following the experience (case study) that the instructor, facilitator, leader or guide asks questions to clarify the information received by the learners to determine what issues appeared to be important and to what extent do the learners see points not seen by others. The facilitator might begin by saying "Tell me, what is in your mind about this experience." The response provide a based for discussing the meaning of the different issues in the case.

Sharing - a process for gathering data about the case to pull out as many options for handling the multiple dilemmas. This component takes time and should not be rushed.

Generalizing - This is a component in which learners are invited to determine implications for a variety of situations with various cultural changes. A questions might be raised: "how would you see this situation changing or remaining the same if the students were older, in a large city, of two different tribes, if the teacher were younger etc."

Applying - The application component may lead into role playing or simulation to demonstrated how this information might be used in the home situation. This is an extremely important component for demonstration and practice. For example, in a workshop with senior educators who were expected to introduce a practice to local learners, the educational specialist taught the process to the participants and they practiced the process in front of the specialist so he know they could perform the task. Six weeks late they returned to the workshop with tales of failure. The participants had taught the lesson to the local people as it had been taught to them but they failed to practice teaching it in front of the specialist as they would at the local level. They failed to translate the lesson for local use. The Application is not for the specialist but for all to see how the practice might be demonstrated at the level of the end-user.

The Application can easily become the next "experience" in the ELP.

Summary

School reform will continue to be a process of challenge and change. Leaders of educational reform will charge with the task of re-building school programs that take into consideration a holistic approach to school reform. In fact some leaders have said that changing various internal and external elements of the system may not be the answer. They have stated that nothing short of a re-building of the educational system will do the job of developing and maintaining a literate citizenry. This latter view suggests that the elements of the system will need to change in a synergistic way. Even though this paper has had a focus on the teacher as an element of change, the author shares the view with others that a holistic approach to change is necessary,.

The major premise of this paper is one which states that pre-service and in-service education of teachers should be developed as an interactive process. This process provides an opportunity for teachers to build a "bag of behavior options" which might be used when the variables in a situation change. Such teachers would be able to act in appropriate ways to situation, which occur that are unique, incongruent and at odds with current values of professional practice. Espoused theories that depend on behaviors that are predictable and tested will not serve the practitioner in a dynamic learning environment. Theories of Action may better serve the practitioner. Theories of Action can be taught through the use of case research studies, simulations and an experiential learning process. These are risk-taking experiences but they could lead to an element of school reform that meets the challenges of a changing society.

References

Argyris, Chris et al (1985). Action Science. Jossey-Bass: San Francisco, CA.

Argyris, Chris and Schon, Donald A. (1975), Theory in Practice Jossey-Bass: San Franciso, CA.

Glaser, Edward M. et al (1983), Putting Knowledge to Use. Jossey-Bass: San Franciso, CA.

Kolb, Donald (1991), Experiential Learning, McGraw-Hill: New York, NY.

Malone, Violet, in Klein, Hans (ed) 1996, **Interactive Teaching and Emerging Thechnologies**. Structuring Decision-Based Cases for Interactive Learning Utilizing an Experiential Learning Process," Omni Press: Madison, Wisconsin, USA.

Pffeffier, James et al (1990), Experiential Learning Activities, Jossey-Bass: San Francisco, CA.

SOCIAL STUDIES PROGRAMME IN TEACHER EDUCATION TO ENHANCE DEMOCRATIC VALUES AND PRACTICES

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INTRODUCTION

A well-functioning democratic society requires that citizens identity with freedom, justice, equality, rule of law, respect for group differences and international human rights (Michaelis, 1992). These values are similar in democratic countries around the world because they are universal values. How each country defines democracy for the next generation depends on its own political, economic and cultural context.

Democratic values are promoted in the home, in religious and community groups, in the media and in schools. Teachers teach students democratic values when they foster "commitments to communication, scientifically informed debate, experimentation and space for dissent" (Kahne, 1996, p. 6). The implications for teachers are that they need to understand and internalize democratic values in order to teach their students about democracy.

This study focuses on whether student teachers in a social studies Programme can identify democratic values and can perceive that certain types of pedagogy and programmes can inculcate democratic values.

History of Values Education in Singapore

Social studies programmes in schools are not the only means of inculcating values education in Singapore. Various types of programmes for moral and civic education have played a major role in educating children for moral values and character building.

An early programme to teach values education was the introduction of the *Education For Living in* 1974 which replaced a civics syllabus taught since 1967 (Gopinathan, 1995). In 1981, the Being court *Becoming Moral Education Programme was* launched. At the same time, a programme in Chinese called *Good; Citizen* was developed.

After the *Report on the Ministry of Education* 1978 on a New Education System the course on *Education for Living* was scrapped. It was replaced by *Moral Education "to* help give all school children a set of (democratic) values which would guide them in their adult life" (Wong, 1995, p. 2). It was later decided that teaching *Moral Education* should be reduced from seven periods to three periods per week. In conjunction with the reduction of time, a new subject, social studies, was introduced. This subject was more modern in terms of content and teaching methods. It fitted well into the primary school curriculum Being; broad in scope and *with* an emphasis on values education, it became a useful way to teach democratic values. In the 1980s a series of *Religious Education* programmes were introduced, but later withdrawn. They were part of the broader values education programme in the school curriculum. The fact that social studies remains in the curriculum today is an indication of its usefulness in teaching democratic values. The values taught seem consistent with the philosophy and practice of the present government and various social institutions. However, emphases on certain democratic values shifted as Singapore dramatically moved from an entrepot economy *to* one based on manufacturing and financial services. Similarly, the democratic values education in the social studies programme was revised to meet the new needs of a rapidly developing nation.

The Social Studies Programme at the National Institute of Education

The National Institute of Education (NIE) offers nine different modules for training social studies teachers. Each module in the primary school curriculum focuses on a specialized area of social studies. For example, *Module NCL121 Classroom-based strategies in social studies* focuses on the various ways of effectively teaching the subject in the classroom, whereas *NCL122 Teaching Social Studies in the* Environment focuses on using fieldwork to teach social studies. Values education underpins both modules.

Student teachers in the social studies programme learn about democratic values in their lectures and group discussions. Democratic values are explicitly taught and discussed during at least one lecture and one tutorial. They practice democratic values in their tutorials and when student teachers teach primary school students during their practicum.

The social studies programme in teacher education in Singapore aims to expose student teachers to a variety of classroom-based and field-based teaching strategies in social studies. It promotes the use of social studies for the teaching of values and attitudes in all lecture and workshop sessions. In many ways, it enhances democratic values and practices.

In 1996 a list of democratic values used in the NIE social studies programmes was drawn from the Shared Values and Family Values. The Shared Values in Singapore were adopted by Parliament in 1991 and include

- nation before community and society before self;
- family as the basic unit of society,
- community support and respect for the individual,
- consensus, not conflict and racial and religious harmony, in 1994, an official set of Family Values was chosen, namely love, care and concern; mutual respect, commitment, filial responsibility; and communication.

This 1996 list (see Table I) was given to NIE student teachers in the social studies programme for discussion in their tutorial groups Students were expected to promote and teach these values through the existing content of the primary social studies curriculum and through structured learning activities.

Table I List of Democratic Values (1996)

Nation before Community and Society before Self
- loyalty
- patriotism
- tolerance
- honesty
- unselfishness
- respect for nation, community and organization
- honesty to the nation and community
- duty to the nation - National service, civic consciousness
- responsibility to participate in the democratic process (voting)
- responsibility to work for the common good
- uphold a good image of the nation unity for the nation

Family as the basic Unit of Society
- family love, care and concern
- mutual respect within the family
- family commitment
- filial responsibility
- respectful (democratic) communication in the family

Community Support and Respect for the Individual
- individual rights to life, justice, housing, security, education
- respect for individual differences

Consensus, Not Conflict
- tolerance, patience, peace
- respect other's opinion
- cooperation and collaboration

Racial and Religious Harmony
- respect for ethnic difference
- respect and tolerance for other's religion, culture and beliefs
- considerate and helpful to others
- living in harmony

The social studies syllabus in teacher education conveys an appreciation of the past, the benefits of a democratic government, and the values of diligence, perseverance, courage and community support. NIE lecturers remind student teachers to focus on these values when teaching historical topics. Thus the social studies syllabus for the primary school level aims to develop the knowledge, skills and attitudes of effective participation in society. Student teachers are reminded to teach democratic values when they follow the affective/values objectives of the primary social studies programme listed below:

- Be aware of shared values which would help to forge a common Singaporean identity.
- Understand and respect customs and traditions of the various communities in Singapore.
- Recognise the importance of co-operation among members of society.
- Be aware of and understand the need for interdependence among people and among countries.
- Be aware that each has a responsibility towards ensuring a clean and safe environment to live in.
- Understand and adjust to change.

Teaching democratic values through pedagogy

Besides an intensive training of values in the social studies programme, student teachers learn values through pedagogical activities. The practical hands-on activities and group-work learning provide opportunities to share ideas and to practice teaching democvalues. Care is taken to group student teachers into heterogeneous ethnic groups so that they can interact and practice values such as respect for other's culture and beliefs.

For example, student teachers cover "The Neighbourhood of our School" chapter in primary school social studies class In their teaching of the material, they impart the following values through group discussion: civic consciousness, neighbourliness, care and concern for the community, cooperation, living in harmony and self-reliance.

Another part of the social studies programme is the tutorial sessions on teaching approaches. Student teachers are free to draw examples from any part of the syllabus when they are in tutorial groups. In this way, many values are selected and discussed during the sessions. One of the approaches used to teach social studies is the lecturer modeling democratic values as they teach student teachers. Another approach is when student teachers are required to keep a journal to record the values that they think each lecturer promotes. They list ways that the lecturer imparts values and reflect on the values imparted. Near the end of the term, the journals are submitted to the lecturers for their analysis of how various approaches and material promote democratic values in the social studies programme.

Methodology

To see whether a social studies programme in teacher education enhances democratic values, a pilot study was conducted.

Subjects and Survey

A survey was administered in October 1996 to 50 student teachers in a social studies programme at the National Institute of Education in Singapore. The student teachers were first-year students in the Bachelor of Arts Diploma in Education Programme (4 years) or in the Diploma in Education Programme (2 years).

The four sections of the survey covered democratic values and practices. Section A asked the student teachers to examine eleven democratic values and mark whether they strongly agree, agree, disagree or strongly disagree that they are democratic values.

The democratic values listed are human rights, justice, equality, regard for group differences, respect for majority rule, respect for other's property, respect for government leaders, freedom of speech, press, assembly, freedom of religion, right to vote and clear separation of power.

Section B listed the same democratic values and asked the student teachers to strongly agree, agree, disagree or strongly disagree on whether the values are Asian values. While Section A focused on identifying democratic values in general, Section B looked at the democratic values in an Asian context, namely Singapore.

Section C listed five democratic values often discussed in the social studies programme. The values are justice, individual rights and responsibilities, equality, tolerance for group differences and respect for government leaders. The student teachers were asked to mark whether they strongly agree, agree, disagree or strongly disagree on whether the values were taught in the social studies programme.

Finally, Section D covered various pedagogical techniques and programmes to teach and model democratic values. They included group work and project work, team teaching, fieldwork, extra-curricular activities, social studies programme, and civic and moral education lessons. Student teachers again marked whether democratic values can be taught or promoted through different teaching and learning processes and programmes.

Results and Discussion

There are very few people who are not familiar with the terse, democracy. Democratic values are associated with the accepted values of a democratic society and tied to democratic processes. Children should develop a positive attitude towards these values which are necessary for democratic citizenship. The history of Singapore as a democratic nation provides knowledge about democracy and democratic values. The results of the survey indicate that a majority of the student teachers agree strongly or agree that these eleven values are important democratic values. The questionnaires did not intend to obtain information of how and when they acquired this knowledge. Also, the agree category on the following table combines strongly agree and agree responses. Similarly, the disagree category combines strongly disagree and disagree responses.

(Table 2)
Perceptions of Perceived Democratic Values (Section A) and Whether these Democratic Values Exist in Singapore (Section B) (N=50)

	Perceived Values		Values in Singapore	
Democratic Values	Section Agree	A Disagree	Section Agree	B Disagree
human rights	50	0	37	13
justice	49	1	47	3
equality	49	1	36	14
regard for group differences	49	1	40	10
respect for majority rule	42	8	44	6
respect for other's property	46	4	45	5
respect for government leaders	41	9	46	4
freedom of speech, press, assembly	48	2	17	33
freedom of religion	48	2	36	14
right to vote	50	0	44	6
clear separation of power	36	14	36	14

More than 90 percent of the student teachers identified the concepts of human rights, justice, equality, regard for group differences, respect for other's property, freedom of speech, press, assemble, freedom of religion and right to vote as democratic values respect for government leaders (82 percent) and respect for majority rule (84 percent) are clearly democratic values but less than 85 percent of the student teachers were certain that these were democratic values. Fourteen out of 50 student teachers (28 percent) disagreed that a clear separation of power is a democratic value.

Section B results showed that democratic values exist in an Asian society. A democratic value freedom of speech, press and assembly (34 percent), was less perceived as a democratic value in an Asian society, namely Singapore.

To understand this response, a brief discussion of democracy in an Asian context may be beneficial. The rapid economic growth in Singapore is greatly due to its political stability, social discipline and education (Devan and Heng, 1994). Two ideas are central to an Asian democracy: First that collective interests are above individual ones, and second that collective interests are based on consensus. The focus on group consensus over individual rights is called the "right to be consulted" where individual freedom to speech, press and assembly are constrained within the conceptual space of collective interest (da Cunha, D., 1 994).

In Singapore the political system, a parliamentary democracy with a president and a prime minister, undergirds the educational system The political culture emphasises stability and objection to policies through official channels rather than conflict and confrontation (Gopinathan, 1993; Clammer, 1985). Professor Tu Wei Ming of Harvard asserted that a Confucian tradition underlies many Asian societies, such as Singapore. In these societies, a community of trust exists where rights are wedded to responsibilities. Order and peace are necessary. He further asserted that the Asians preference for harmony and consensus need not be a threat to individual rights.

Moreover, The Straits Times, a newspaper in Singapore, published a story entitled, "Debate on Asian Values Really Over How To Run Society" (June 1, 1994, p. 26). It stated that "the argument over Asian values is about how to organise any rich, modern society late this century and early next; and about how to strike a balance anywhere between freedom and order, and between government responsibility and individual and family responsibility."

Sections A and B of the survey covered student-teacher perceptions of democratic values. The results suggest that student teachers are aware of democratic values whether at the "ideal" level or in the context of an Asian society. Sections C and D examined student-teacher perceptions about democratic values taught in the social studies programme. Five values which are frequently promoted in the social studies programme are justice, indivrights and responsibilities, equality, tolerance for group differences and respect for government leaders.

The results show that more than 75 percent of the respondents agree that the NIE social studies programme promotes these five values (see Table 3). The difference lies in the overwhelming support of this programme in teaching individual rights and responsibilities, equality and tolerance for group differences. They agree 94 percent and 96 percent respectively. Justice (82 percent) and respect for government leaders (76 percent) had slightly less agreement. The difference could lie in the content of the primary social studies syllabus as well as the initial teacher education social studies programmer.

Much emphasis has been given to Singapore history and geography in the primary social studies syllabus. Many of these values of individual rights and responsibilities, equality and tolerance for group differences can be taught via the history and geography of Singapore. For example, tolerance and appreciation of ethnic differences are explicitly taught in the chapter " Way of Life of our People." On a broader perspective, these values are covered again in the chapter, "Singapore and her Southeast Asian neighbours." On the other hand, "respect for government leaders" does not explicitly appear in any chapter in the social studies textbook. Students are taught indirectly to respect authority in Singapore. The message is that the teacher education programme needs to more explicity teach democratic values which are implicit in the primary social studies syllabus.

(Table 3)

Section C: Number of Respondents Who Agree and Disagree that Democratic Values Are Taught in a Social Studies Course at NTE

Democratic Values in social studies at NIE	Respondents	
	Agree	Disagree
justice	41	9
individual rights and responsibilities	47	3
equality	46	4
tolerance for group differences	48	2
respect for government leaders	38	12

N= the total number of respondents=50

Section D examines whether democratic values can be taught in various ways in the social studies programme at the National Institute of Education. Six broad categories were given: group work and project work, team teaching, fieldwork, extra-curricular activities, social studies programme, civic and moral education. A variety of categories was used intentionally because democratic values have been taught through all subjects formally and informally. The pupil-centred teaching approach favours the teaching of these values through group learning activities. Whether student teachers agree that democratic values were taught through these programmes and pedagogy, the possibility of teaching values in a pupil-centred method is encouraging (see Table 4).

(Table 4)

Section D: Number of Respondents who Agree or Disagree that Democratic Values Can Be Taught In Various Ways (N=50)

Democratic Values in social studies at NIE	Respondents Agree	Respondents Disagree
Group work and project work	44	6
Team teaching	44	6
Fieldwork	40	10
Extra-curricular activities	42	8
Social studies	47	3
Civic and moral education	47	3

There is a strong support for group work and project work as avenues for teachers to promote and for students to practice democratic values. While it is important for the teachers to identify the desired values for young people to learn, it is important that the teacher also creates the environment for promoting these values among the students themselves. A total of 88 percent support various practices. This is encouraging because it indicates a move away from the teacher-centred activities to a purposeful use of these activities for teaching values. The most encouraging result is that student teachers overwhelmingly support social studies as a values education subject (94 percent). Team teaching (88 percent) and fieldwork (80 percent) are important parts of the social studies programme at NIE. The positive results reinforce the teaching of democratic values through understanding the subject area and teaching and learning democratic values in various ways, especially group work.

323

CONCLUSION

This study reveals that student teachers easily identified democratic values and to a slightly lesser extent perceived that democratic values exist in an Asian country, namely Singapore. An official list of Singapore democratic values seems to be similar to the American Democratic List *(see Appendix. P. 11)* established by the National Council Social Studies Task Force (1989). The difference is the American list focuses on the individual and the Singapore list focuses on the group.

The national set of democratic values which was made official in 1991 in Singapore was seven as reference to student teachers in the social studies programme at NIE. The list given as reference to student teachers programme served as a starting point for the discussion about democratic values in social studies lessons.

It is also important to draw attention to democratic values because of its importance on a global scale. Children cannot know the democratic shared values in Singapore without knowing the widely discussed issues, such as human rights. Children should be able to see that while Singapore has often been criticised as Asian and non-democratic, in fact, it has democratic values which are acceptable as universal values. The way ahead is to clearly explain to student teachers that democratic values education is an important area to cover in social studies.

References

CDIS (1994) *Social Studies Syllabus for Primary Schools.* Singapore: CDIS . p. 6

Clammer, J. (1985) *Singapore: Ideology Society, Culture* Chopmen Publishers, 1985.

de Cunha, D. (Ed). (1994) *Debating Singapore.* Singapore: Institute of Southeast Asian Studies.

Debate on Asian values really over how to run society. *The Straits Times,* June 1, 1994.p.26.

Devan, J and Heng, G. A Minuimum Working Hypothesis of Democracy for Singapore. In de Cunha, D. (Ed). (1994) *Debating Singapore.* Singapore: Institute of Southeast Asian Studies.

Gopinathan, S (1995) Religious Education in a Secular State: The Singapore Experience. *Asian Journal of Political Science 3 (2): 15-27.*

Gopinathan, S. (1993) Education. In J. Quah, Chan Heng Chee, Seah Chee Meo (eds). *Government and Politics in Singapore,* Singapore: Oxford University Press.

Kahne, Joseph (1996). Rethinking Education for Citizenship. The *Responsive Community.* 6 (4) 6-9

Michaelis, J.U. (1992) *Social Studies for children.* London: Allyn and Bacon.

Tu Wei Ming (1995) Democracy better for Confucian ideals. Wu The Yao Memorial Lecture in Singapore, 23 March 1995

NCSS Task Force (1989). In Search of a scope and sequence for social studies. *Social Education, 53, p.383*

Wong, Y Y (1995) Incorporating Peace Education in the Social Studies Curriculum in Singapore. Paper presented at *the International Council on Education Teaching 42nd World Assembly* at Bandar Seri Begawan 3-7 July.

Appendix

National Council Social Studies Task Force has established a core list of democratic values for incorporation into social studies programmes across the United States. The democratic values are grouped into four categories (1) rights of the individual, (2) freedoms of the individual, (3) responsibilities of the individual and (4) beliefs concerning societal conditions and governmental responsibilities.

American Democratic Values
A. Rights of the Individual
Right to life
Right to liberty
Right to dignity
Right to security
Right to equality of opportunity
Right to justice
Right to privacy
Right to private ownership of property
B. Freedoms of the Individual
Freedom to participate in the political process
Freedom to worship
Freedom of thought
Freedom of conscience
Freedom of Assembly
Freedom of inquiry
Freedom of expression
C. Responsibilities of the Individual
To respect human life
To respect the rights of others
To be tolerant
To be honest
To be compassionate
To demonstrate self-control
To participate in the democratic process
To work for the common good
To respect the propof others
D. Beliefs concerning societal conditions and governmental responsibilities
Societies need laws that are accepted by the majority of the people
Dissenting minorities are protected

Source: NCSS Task Force (1989)

DIFFERENT DRUMMERS, DIFFERENT BEATS: CULTURAL CONTEXT VS. MUSICAL CONTENT IN THE EDUCATION OF AN ARTISTIC POPULATION

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Hong Kong

The education of young people in the varied forms and practices of human expression begins with a child's first encounter with one of these forms. Every song, dance, sculpture, drawing, verse, or drama that a young person experiences shapes their understanding of themselves and the world around them As educators, choices we make about the expressive materials and artistic traditions we introduce to our students are of great importance to the development of their values and self-identity. But as access to the achievements of so many 'of the world's cultures increases, the choices available to us become more numerous. And as the diversity of so many of the world's classrooms compounds, these choices become more consequential.

Isolating one specific context, the purpose of this paper is to consider the role that cultural identity may play in the development of responses student listeners display to the music they. Encounter and the degree to which these responses may be affected by either culture-specific or content-specific information. To do so, the following format will be employed: (a) presentation of a framework for considering music as a thought process rather than a 'particular organization of sounds, (b) introduction of one means--study of musical preference-- through which this thought process might be investigated; (c) a discussion of a philosophical foundation for the investigation of musical response as a culturally specific phenomenon along with a more detailed presentation of the concepts of musical content and context; (d) presentation of the results of recent research that begins to address several questions brought to educators by this relationship between culture and musical response, (e) and, finally, several recommendations for the broadening of focus within the arts classroom.

Music as a Way of Thinking

To say that music differs from culture to culture seems, at first, to be a grossly simplistic statement of the obvious However, this first reaction is most likely due to an overly narrow interpretation of the statement. One would, more than likely, be responding to the notion that the music of different cultures Sounds different. The use of varied instruments, vocal techniques, rhythmic constructions' tonal differentiation and lyrical content, among other characteristics, can Different Drummers 4 easily assist a listener in either the identification of a particular musical tradition or, at least, the differentiation of that tradition from their own.

To consider the full implications of the initial statement--that music differs from culture to culture-it essential to take into account the full range of what is meant by Music. In his proposal for a new philosophy of music teaching, Elliott (1995) wrote:

> In the case of Beethoven's "Eroica" Symphony, or the ket drumming of the Asante people, or a Zuni lullaby, or Duke Ellington's Cotton Tail, and in every example of a musical product that comes to mind, what we are presented with is more than a piece of music, a composition, an improvisation, a performance, or a "work" . . . What

> we are presented with is the outcome of a particular kind of intentional human activity. Music is not simply a collection of products or objects. Fundamentally, music is something that people do. (D. 39)

We must then consider music as a thoughtful behavior. It is a cognitive--as opposed to a purely sonic-phenomenon. The sounds that are produced by musicians are the results of a type of thought that we might call musical , Similarly, the interpretation of these sounds is also the product of musical thinking. With this in mind, the apparently simplistic notion that music differs from culture to culture carries much deeper implications-that the experiences of music making and music listening differ from culture to culture. In other words, members of various cultures do not merely hear different sounds; they think about sounds in different ways. This way of thinking about music is often referred to in arts philosophy and arts education as aesthetics.

Aesthetics is a vague and slippery term traditionally defined as the study of the relationship of music to the human senses and intellect. Unfortunately, the human senses and intellect are not nearly as observable and measurable as the sonic phenomena we usually identify as music To be observed an aesthetic must manifest itself in some concrete way. Not that thought, itself, is without consequence, but as Skinner wrote about introspection and mental activity in his discussion of behavioral psychology, No very good account of a mental process! is now available...and it therefore seems all the more important that we should be in touch with it in other ways."

Preference as an indicator of Musical Thinking

For music education researchers, one of these ways has been observation of the music that student listeners choose to hear, how they compare the music they hear to other music they have heard, and what they have to say about the musical sounds with which they are confronted. These types of investigations are broadly classified as preference research.

LeBlanc (1982), theorizing on the factors affecting preference decisions, wrote, "Music preference decisions are based upon the interaction of input information and the characteristics of the listener, with input information consisting of the musical stimulus and the listener's cultural environment." 29). In other words, in making value judgments about music, a listener encounters the sounds of the music itself--we may refer to this as content--and the meanings, associations, and beliefs carried along with those sounds-we may call tcontext These two terms will be discussed in greater detail below.

While much study has been carried out in the area of preference, it is only recently that culture has been consistently included as a variable The findings thus far, though limited, have been telling. A consistent pattern has emerged that indicates more positive responses from listeners to music that bears characteristics identified with their own culture or ethnicity. Though it is impossible to state with any certainty which of these characteristics may not be culturally salient, others can definitely be identified as consequential. Such items as performance practice (vocal styling, speech patterns), genre (gospel, Salsa, blues, etc.), celebrity (easily identifiable works or performances) and identity (names photos or videos of the performers) can offer obvious and immediate information about the cultural associations of a piece of music.

But how might these cultural associations affect a listener's aesthetic experience, the way he or she actually thinks about the musical sounds presented? At this point, it would be beneficial to consider the interactive relationships integral to musical encounters and their inextricable links to the larger cultural context.

Philosophical Foundations of Culturally Specific Musical Thought

It is common among the general population (and even throughout early research literature) to consider individuals as members of one of a number of races identified according to particular physical characteristics. Of course, such physical differentiation is not as easily discernible as traditional racial divisions might suggest. Summarizing the conclusions of numerous social scientists, Marger (1991) stated, Differences among individuals of the same group (or 'racial type') are often greater than those found between groups...categories form a continuum of gradual change, not a set of sharply demarcated types" (pp. 20-21).

Current sociological research advocates the term ethnic group Instead of a classification according to arbitrarily selected physical characteristics, the ethnic group is identified according to its cultural behaviors or traits. By defining populations first according to behavioral characteristics, self-identification--as opposed to externally imposed categorization--becomes an essential element in the process of differentiation. The critical difference between members of one ethnic group and other ethnic groups then becomes cultural--shaped by the environment--and not genetic.

Recall, LeBlanc (1982) identified the environment as one of two mayor influences--the other being the musical stimulus itself--on the preference decisions of a listener, one of the most frequently studied manifestations of an aesthetic value system. The impact of cultural differentiation on musical response was addressed by Meyer (1967) in his study of music and meaning when he stated, Cultural beliefs not only influence the way in which we perceive, think and act, but they also condition and modify our emotional and physiological responses (p. 57). The idea of music as a conditioning agent reflects Meyer's belief in the source of musical meaning

> the customary or expected progression of sounds can be considered as a norm, which from a stylistic point of view it is; and alteration in the expected progression can be Considered as a deviation. Hence deviations can be regarded as emotional or affective stimuli. (Meyer, 1956, p. 32).

These expectations and resultant deviations are not absolute. Meyer, again: The probabilities of style and form, the norms upon which expectations rest, differ from culture to culture and style to style" (Meyer, 1956, p. 73). If musical meaning is derived from the manipulation of expectations, and if expectations are constructed according to previously established conventions determined by cultural and stylistic influences' then we can say that, as listeners, our responses to prior musical encounters within a particular cultural and stylistic context determine, to a large degree, our responses to future musical encounters. The listener, however, is only one component of the creative process.

According to Reimer (1989), the creative process is comprised of three essential elements--the rtist r reator, he rtwork r reation nd he erceiver. Reimer labels the interaction between the artist and the art work aesthetic creation; interaction between the art work and the perceiver he labels aesthetic sharing In addressing the possibility of a culturally specific musical aesthetic it is essential to take both of these interactions into account. Is it enough to say that an traditional Chiu Chou musician from Eastern China or a Cantonese pop singer in Hong Kong, for example, produces music with a fundamentally unique expressive content without considering the response of a listener? Likewise, is it sufficient to state that an African-American listener experiences a specific piece of music differently than a white, Hispanic or Asian counterpart without taking into account the music's source?

A particular connection between creator and perceiver was proposed by Dewey (1934): "For to perceive, the beholder must create his own experience And his creation must include relations comparable to those which the original producer underwent" (p. 54). Dewey suggested that the expressive act represents, to some degree, a culmination of the artist's past experiences and personal history:

> *What is expressed will be neither the past events that have exercised their shaping influence nor yet the literal existing occasion. It will be, in the degree of its spontaneity, an Intimate union of the features of present existence with the values that past experience have incorporated in personality. Immediacy and individuality, the traits that mark concrete existence, come from the present occasion, meaning, substance, content, from what is embedded in the self from the past. (p. 71)*

The influence of culture is strongly exerted on each of the three elements comprising the creative process It plays a vital role in the shaping of the artist's past experience. In turn, the collected creative output of these artists establishes the essential stylistic norms from which musical meaning may be drawn. And, finally, it produces informed perceivers who may interpret these expressive forms according to these same culturally-derived patterns of expectation.

Expressive forms in which the composite elements have been arranged according to stylistic norms determined by a particular culture must act on members of that culture in a unique way. If we are to consider Korean-ness, French-ness or Navajo-ness to be a cultural identity and not a purely genetic phenomenon, we must conclude then that the response of a Navajo individual to Navajo expressive forms must be unique Clearly, investigation into the culture-specific aspects of musical thinking in needed.

The Content / Context Dichotomy

How might investigation of culturally specific aesthetic values proceed among researchers both within and outside specific cultures? Past and ongoing research seems to fall along three important avenues of inquiry. Sloboda (1985) identified two avenues which should be familiar to us--content and context (p. 247). To these I propose adding a third--contact.. Analysis of the content of any musical form is largely descriptive in nature and involves an examination of the particular sonic qualities and immediate performance practices demonstrated by or characteristic of a given musical style. For example, Oliver's (1970) study of African influences In American blues performance examines the melodic, rhythmic, timbral and lyrical traits of both musical traditions and suggests that the American-born blues may have had its origins in the interior Savannah regions of Africa instead of the coastal regions as previously thought. Burnim's (1985) analysis of African-American gospel music styling reveals sound quality, delivery style and technique as the three primary variin gospel performance. Though each writer is of a different cultural/ethnic background, through their respective use of comparative and descriptive research methodologies each provides models for the objective study of cultural-specific musical content.

While the study of a music's content focuses on form, the study of its context focuses on function. Wilson (1985) compared the two approaches when he wrote:

> *Most studies tend to make comparisons on the basis of the presence or absence of specific musical characteristics While this approach is certainly necessary and valuable as far as it goes, it is inadequate in expressing the full nature of the relationship, because this approach deals with foreground aspects of the music and not the guiding background factors which, in fact, determine the presence of these foreground features. (p. 9).*

Illustrating this, by listing, Maultsby (1985) identifies contextual aspects -social function, community function of musicians, subject matter and the role of motion and costume in musical performance-as cing mong hc ost ignificant retentions of West African traditions in contemporary African American musical practice.

The study of music within a cultural context is an examination of the of an expressive form with the value systems of a specific group, a group that may be bounded more tightly than by ethnicity alone. It is the responsibility of any researcher to learn the expressive contingencies of such a group, that is, to gather an understanding of the place of a music it is essential to gather, through interview, observation and near-immersion, an understanding of the social, religious and political constructs that support and exert influence on the medium. The culturally-specific foreground qualities of the music must be set against an appropriate and equally culturally-specific background.

The study of musical contact pinpoints the specific interaction of individuals with musical sounds--the point at which content and context intersect. One of these points, and the one most important to us as educators, is the classroom. Understanding the vital roles of both content and context within meaningful musical experiences, modern music educators seek the appropriate balance between the two. To strike this balance, we need to know how these two aspects of aesthetic experience affect our students, musical encounters. In other words, an understanding of content and context may help us to facilitate the most powerful contact.

Through control or manipulation of musical content or context we may gain insights into the processes by which individuals learn the patterns of expectation so unique to each culture. The observation of an individual's responses--verbal, behavioral, written, physiological--allows the best possible means of constructing a complete picture of how a person or group of persons interacts with organized sound. Inquiry of this type seeks to gather listeners, responses to selected musical examples. These responses most often take the form of numerical evaluations or written descriptions. Less often, students are asked to freely choose songs or parts of songs that they like, would like to hear, or would like to perform themselves. In some cases, researchers augment data with observations of informal classroom behaviors--e.g., attention, questions, comments. At this point we are able to ask several specific questions about the interaction of cultural identity and a listener's expression of their musical values as demonstrated by preference decisions.

Research on Culture and Music Preference

If ways of thinking about music vary among cultures or ethnic groups, it seems logical to expect observable responses to music to differ as well. Do members of different ethnic groups or cultures demonstrate different preference responses to similar musical encounters? Up to the present, research in this area has been largely conducted in the United States. This is partly due to interest in increased educational use of popular music styles in the late 1960s and early 1970s and the recent emphasis on the use of multicultural educational materials. More significantly, the civil rights movement of the 1960s sparked interest, continuing to this day, in issues related to the nation's broadening and deepening cultural pluralism.

As a result, many studies have focused on the responses of white and African-American students, reflecting the country's two largest cultural groups Earlier studies Investigated preferences among white and African-American undergraduates (Appleton, 1970/1971) and junior high, senior high and college students (Meadows, 1970/1971) for general musical styles such as rock, soul, jazz and gospel. More recent work examined responses to particular musical selections by elementary (May, 1985), middle school and college-age listeners (McCrary, 1993a, Morrison, 1993, 1996). In each case, consistent differences between these two groups were observed.

Recently, investigations involving listeners from other groups have been undertaken. Though still centered on students within the United States, a study by McCrary (1993b) included Latino along with white and African-American middle school students. Again, clear differences were observed among these three groups in their evaluation of selected musical examples.

On a more international scale, music preference responses have been compared between Japanese and American college students (Darrow, Haack & Kuribayashi, 1987), Mexican and American tertiary teachers and students (Pembrook, 1996), and Hong Kong Chinese and American college students (Morrison & Yeh, 1996). As with the U S. findings, in each case listeners from each group exhibited differing preference response patterns.

Have any consistent patterns emerged among all these differences in preference response? Hedden (1981) suggested that listeners are "more attracted to music which they regard as their own" (p. 22). This seems to be supported by findings from preference research. May (1985), who investigated preference responses of white and African-American elementary students, reported:

> *Differences in the two racial groups' preferences were observed only among excerpts that featured elements clearly associated with a particular race . . . There were no differences in racial group preferences for musical excerpts without racially identifying elements (p. 19)*

This effectively summarizes the trend observed throughout this line of research. When responses differ along ethnic lines, listeners most often demonstrate a preference for music associated with their own cultural background. (It is important to note that students were generally not negative towards music featuring characteristics of ethnic groups other than their own. However, LeBlanc and Sherrill, 1986, reported that white, African-American, and Hispanic middle school students were observed mocking musical styles associated with other cultural groups.)

African-American and Latino students were generally more positive about examples drawn from their own culture's traditions or performed by artists from their own ethnic group (Appleton, 1970/1971; McCrary, 1993a, 1993b; Morrison, 1993, 1996). Japanese students were more positive styles than American students about Eastern musical (Darrow, et. al, 1987). Mexican listeners were more positive than their American counterparts towards Salsa and traditional Mexican music (Pembrook, 1996). And according to preliminary data, Hong Kong Chinese students rated traditional Chinese music more positively than American students while the Americans gave higher marks to jazz examples than the listeners in Hong Kong (Morrison and Yeh, 1996)

There are two notable exceptions to this pattern. First, among the students from outside the United States--including Mexican, Japanese and Hong Kong Chinese respondents--responses to Western classical music were as positive as responses of U. S. listeners. Perhaps the presence of this musical style in so many of the world's music curricula has dits associations with specifically Western culture Through such extensive contact, it may be speculated that this element of Western musical culture has actually become a component of the culture of these listeners

A second exception is the case of white students in the United States Among these listeners no pattern has emerged of preference for musical examples associated with a particular ethnic or cultural group. It is possible that, among these students, the sense of a group ethnic identity is not as strong as among other American cultural communities On the other hand, it is possible that patterns observed among African-American and Latino students within the U. S. are due more to their specific identity as minority group members than their identity as members of a given ethnic group. This has been suggested in a more general context by Hagborg (1989) and Singleton and Asher (1979).

Might there be other educational consequences arising from these preference patterns? So far, most research in the area of preference has been descriptive. Music education researchers are still attempting to establish a basic understanding of the manner in which preference responses differ among students of different cultural backgrounds. Certainly, from a music educator's point of view, finding music to which students respond more positively is an important end in itself. However, a few studies have reported results that may be significant in setting the direction of future work in this area.

Killian (1990) investigated the impact of musical role models on 7th and 8th grade students. After viewing a music video that included a number of both white and African-American performers, students were asked to choose vocal solos they would like to perform, African-American students tended to identify solos originally performed by African-American artists. Hispanic students, who had no Hispanic artists from which to choose, demonstrated mixed choices. It may be speculated that the presence of role models representing students' own ethnic group may result in greater or more eager participation in music performance activities such as singing or instrument playing.

Interest may not be the only area affected by the use of culture-specific music materials. Woodard (1970/1971) reported that African-American junior high school students demonstrated significant improvement in both achievement and attitude when the teaching materials used in their classes featured African-American styles and performers. McCrary and Gauthier (1995) reported that African-American 7th grade students exhibited heightened attention during recorded performances by African-American musicians as part of their regular music classes. None of these findings are conclusive, but they suggest that an understanding of students' music preferences may provide information more consequential that a sketch of what young listeners like to hear.

Are listeners responding more strongly to the musical content or the cultural context of the sounds they encounter? When students respond more positively to music or musicians associated with their own cultural background are they actually telling us that they like those particular sounds better? Or are they really saying that they prefer "music which they regard as their own" (Hedden, 1981, p. 22)? Research on this important distinction is still in its early stages.

McCrary and Gauthier (1995) examined the responses of two groups of 7th grade students who received a series of ten music lessons. The experimental group was given information about the ethnicity of the performers whose music they were studying. The control group received no such information. Though no statistical differences were found between the two groups, the heightened attention of African-American students during performances by African-American musicians and their consistent inquiries about the ethnicity of the performers suggests that the cultural associations were more consequential that the test instrument could reveal.

Morrison (1993) attempted to control access to culture-specific information by including recorded musical examples that featured both singers, whose ethnic identities were easily identified, and instrumentalists, whose ethnicity presumably could not have been determined from the recording alone. For the vocal examples, African-American colloge-age listeners strongly preferred examples by African-American performers, for the instrumental examples, these listeners demonstrated no particular preference pattern.

To further investigate this, Morrison (1996) gathered responses from middle school students to a series of instrumental music examples, five by white artists and five by African-American artists. Photographs were used to control information about performers' ethnicity—one experimental groups listened to the music and viewed the photographs; a second group listened to the music and viewed photographs of different performers representing a different ethnic group, and a control group only listened to the music. Results indicated that African-American listeners consistently responded more positively to examples they believed to be by African-American performers, whether they actually were or not.

It cannot yet be said that either content or context is of paramount importance in determining students' responses to music However, these findings make it clear that matters of cultural context and musical content are inextricably intertwined. Students appear to seek out cultural connections even when not inaccurately supplied. Perhaps it is can be said that if, as music educators, we are teaching musical content, then we are also--either directly or indirectly--teaching cultural context. It then follows, if we truly aren't teaching cultural context then we are not really teaching music at all.

CONCLUSIONS AND RECOMMENDATIONS

Revisiting a central tenet introduced earlier in this paper, music is a thoughtful behavior. The sounds that we recognize as music are but one component in the dynamic interaction among creators, creations and perceivers. The fact that we recognize these sounds as music reveals as much about our own selves and the environment in which we live and learn as about the characteristics of the sounds alone. Though it is often labeled so, music--or any of the arts, for that matter--is not really a subject. It is not a body of information to be transmitted. Music is a type of personal transaction that takes place within and among individuals who share, to one extent or another, commonalties of musical thought.

Music teaching has traditionally been a very content-heavy affair. For at least two reasons, this is not surprising. First, it is in the area of content where much of music's obvious academic information lies. This type of knowledge--information in the strictest sense of the word--is most closely suited to the lecture-oriented teaching practices commonly employed in schools throughout the last one hundred years or so. Common images of the classroom music lesson include exercises in music notation, singing in solfege (the well-known "do, re, mi" system), or quizzes on the lives and works of famous composers. While all of these things have their place in the larger picture of music teaching, alone they are not music.

Second, it may be assumed that a music's cultural context is already well understood. Or, in as well-meaning a manner as possible, it may be imposed. Both of these cases are the result of situations that can probably be found within many of the world's music classrooms. In one situation, the only music studied in a classroom may firmly reside within the cultural boundaries of the community. In this case, the cultural context is already well-established. Classroom music teaching then takes its place as a subset of the student's larger musical world. In some cases, though it is assumed that everyone in the community shares the same musical culture, this assumption is not always correc. At times, what is regarded as the cultural boundaries of the community are, more accurately, the cultural boundaries of the larger part of that community.

In a second situation, the music studied, while not part of the musical culture, is taught in terms of that culture. As an example, the music texts found in Hong Kong are Dominated by musical practice from the Western classical tradition While this type of music has become a common and well-accepted component of Hong Kong's musical life, it cannot be said that its context remains unchanged. The sounds of this tradition have been successfully transplanted but the manner in which Hong Kongis students and teachers interact with those sounds is, I would argue, very much in line with local musical values . Another example can be found in the contemporary United States music classroom. Though great effort has been made to Include music of other cultures in the curriculum, often each of these musics is approached from the same Western point of view. Elliott (1995) refers to this as a "modified multicultural curriculum" (p. 292).

Perhaps it is this confluence of musical cultures that has resulted in a greater emphasis on and value for individual identity. As noted ethnomusicologist Bruno Nettl (1985) wrote at the outset of his chronicle of the Western impact on the world's music:

> *During the last hundred years, the most significant phenomenon in the global history of music has been the intensive imposition of Western music and musical thought upon the rest of the world . . . not only as a system of sound but also a set of concepts and attendant Technology and behavior. (p 3)*

Research is telling us that today's students are accepting of many types of music, But they are most positive about music which reflects--or they believe reflects--their own cultural identity, Young listeners are affected by matters of cultural context every bit as much as, if not more than, pure musical content.

In reality, the distinction between the two is difficult to make, All truly musical content Exists within a cultural context. Cultural context, by definition, requires some sort of content to contextualize As teachers, to Ignore music's context would be to effectively sever the connections that run throughout the tripartite structure of creator, creation and perceiver. Again, music is a thoughtful behavior. Music teaching must avoid the trap of focusing on the results of that thoughtful behavior at the expense of the motivation behind it. If not, then Students will be taught about sounds, not music.

All listeners place all music within some sort of context, even if that context is entirely inappropriate. To allow our students to do this would be educationally and culturally irresponsible. It is our challenge to prepare educators who are able to develop in all of their students an understanding of the cultural and social aspects of music making and music listening as well as more discrete skills related to the description, creation and performance of musical content.

After all, it is a misnomer to speak of an artistic individual. It t is contextualized interaction among many people that perpetuates the creation of expressive content. The entire history of human expression and its continued development rests on the existence of an artistic population. There are no different beats without different drummers. And there would be, no need for drummers or their beats if the world were not eager to keep marching.

References

Appleton, C. R. (1971). The comparative preferential response of black and white college students to black and white folk and popular music styles (Doctoral dissertation, New York University, 1970). Dissertation Abstracts International 32, 2723A.

Burnim, M. V. (1985). The black gospel music tradition: A complex of ideology, aesthetic, and behavior. In I. V Jackson (Ed), More than dancing: Essays. on,Afro-American music and musicians (pp. 147-168). Westport, CN Greenwood Press.

Darrow, A., Haack, P., & Kuribayashi, F. (1987). Descriptors and preferences for Eastern and Western musics by Japanese and American nonmusic majors. Journal of Education, 35, 237-248

Dewey, J. (1934). Art as experience. New York: Minton, Batch & Co., 1934.

Elliott, D. J. (1995). Music matters: A new philosophy of music education New York. Oxford University Press.

Hedden, S. K. (1981). Music listening skills and music listening preferences. Bu lletin of the Council Research in Music Education, 65, 16-26.

Killian, J. N. (1990). Effect of model characteristics on musical preference of junior high students. Journal of Research in Music Education, 38, 115-123.

LeBlanc, A. (1982). An interactive theory of music preference. Journal of Music Therapy 19, 28-45,

LeBlanc, A., & Sherrill, C. (1986). Effect of vocal vibrato and performer's sex on children's music preference. Journal of Research in Music Education. 34, 222-237.

Marger, M. N. (1991). (2d ed.) Belmont, CA Wadsworth Publishing.

Maultsby, P. K (1985). West African influences and retentions in U. S. black music A sociocultural study. In I. V. Jackson (Ed), More than dancing, F On Afro-American music and musicians (pp. 25-58). Westport, CN: Greenwood Press.

May, W. V. (1985). Musical style preferences and aural discrimination skills of primary grade school children. Journal of Research in Music Education. 33, 7-22.

McCrary, J. (1993a). Effects of listeners' and performers' race on music preference. Journal of Research in Music Education, 41, 200 211.

McCrary, J. (1993b, April) The effects of listeners' ethnic identity on music preferences. Paper presented at the Tenth National Symposium on Research in Music Behavior, Tuscaloosa, AL.

McCrary, J., & Gauthier, D. (1995). The effects of performer's ethnic identities on preadolescents' music preferences. Update Applications of Research in Music Education. 14 (1), 20-22.

Meadows, E. S. (1971). The relationship of music preference to certain cultural determiners (Doctoral dissertation Michigan State University, 1970). Dissertation Abstracts International, 31, 6100A.

Meyer, L. B. (1956) Emotion and meaning in music Chicago: University of Chicago Press

Meyer, L. B. (1994). Music, the arts, and ideas; Patterns and predictions in twentieth-century culture Chicago: University of Chicago Press.

Morrison, S. J. (1993). Toward a black aesthetic: The effect of race on preference and perception of selected popular music. Missouri Journal of Research in Music Education, 30, 26-37.

Morrison, S J. (1996). A comparison of preference responses of white and African-American students to musical versu musical/visual stimuli. Manuscript submitted for publication.

Morrison, S. J. & Yeh C S (1996). Preference responses and use of written descriptors among music and non-music majors in the United States. Hong Kong and China. Manuscript in preparation.

Nettl, B. (1985). The western impact on world music: Change, adaptation, and survival. New York: Schirmer Books.

Oliver, P. (1970). Savannah syncopators: African retentions in the blues. New York: Stein and Day.

Reimer, B. (1989). A philosophy of music education (2d ed.). Englewood Cliffs, NJ: Prentice-Hall.

Skinner, B. F. (1974). About behaviorism. New York: Vintage Books

Sloboda, J. A. (1985) The musical mind: The cognitive. psychology of music. New York Oxford University Press.

Wilson, O. (1985). The association of movement and music as a manifestation of a black conceptual approach to music-making. In I. V. Jackson (Ed.), More than dancing: Essays on Afro. American music and musicians (pp. 9-24). Westport, CN: Greenwood Press.

Woodard, A. D. G. (1979). The effect of Afro-American music upon the performance and attitudes of black educationally disadvantaged junior high school students (Doctoral dissertation, Indiana University, 1978). Dissertation Abstracts international, 39, 5388A.

HOLISTIC INTERVENTION IN THE BEDOUIN TOWN *TEL-SHEVA* INTENDED TO IMPROVE EDUCATIONAL ACHIEVEMENTS

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This paper presents the yet unfinished stay of a holistic intervention in a Beduin town in Israel It does not deal with the underlying theoretical literature assumed in the project, nor does it aims at drawing far-reaching conclusions from this intervention. Nevertheless, we feel that the story in itself has a moral of its own, because of the various dilemma it raises.

BACKGROUND

The Intervening Institution

Within the framework of a national project under the auspices of the Ministry of Education entitled "The 30 Towns Project", the Kaye College has taken upon itself to improve the educational achievements in the adjacent Bedouin town of Tel-Sheva.

Kaye College is a teachers' college in Beer-Sheva, a city in the Negev (south) region of Israel. The region population is varied in many respects - nationalities, religions, ethnic groups - as well as being host to a large immigrant population The College is a multicultural academic institution which comes to serve the community out of the conviction that knowing one's community reflects on the process of training the teachers within that community. An operational result of this conviction is the cultural heterogeneity of the College's student body, as well as the broad assortment of educational tracks offered, among which the Bedouin track is particularly "high profile". Of the close to 1,300 students that study at the College, 300 are Bedouin. Graduates of the Bedouin program track become the kindergarten teachers and school teachers in the town Tel-Sheva.

The Town In Which The Intervention Is Taken Place

Tel-Sheva is the first Bedouin town in the Negev established by the Ministry of Housing in the attempt to settle the Negev's Bedouin population into permanent towns The Bedouins comprise some 10% of the Arab population of the State of Israel, and are approximately 26% of the population of the Negev. In the past, they were organized into semi-nomadic tribes living from raising sheep, goats and camels, and from seasonal farming. In the 1960's, the State began actualizing its programs to settle the Bedouins in the Negev in seven urban towns, of which Tel-Sheva was one.

The town was founded in 1968, and in November 1993 it held its first elections for Town Council. Since then, the town has been run by a Bedouin head of the Council, a resident of Tel-Sheva. The Council serves 7,500 residents of Tel-Sheva, and 2,500 more Bedouins who live dispersed near the town, and get their health and educational services there. The relative socioeconomic status of the residents is low even relative to that of other Bedouin towns. The transition to permanent town changed the sources of livelihood of the residents from herding sheep to salaried employees who have to look for their livelihood outside the town. This being the case, many of the fathers are not home, and their absence is evident in lack of control of the families over their grown children. The transition to permanent housing brought about the meeting in one town of families from various tribes, who had previously lived each within their own territory, and often even fought each other. This rivalry did not disappear, and it spills over, even today, into violent rivalry, sometimes escalating even to the use of firearms. The fact that, today, all the children learn in school together is a source of constant friction, particularly in the high school. The town is riddled with crime and drugs, and the number of residents who are well-educated is low. These and other things are markers of a society in transition from traditional to modern, while dealing with creation of a "new identity" as a minority within Jewish society. The educational system in the town is greatly affected by these elements.

The Educational System in the Town

The educational system in Tel-Sheva includes 8 kindergartens, 4 elementary schools, and one high school. 1,950 students learn in the elementary school system (including the kindergartens), and 1,200 in the high school. A regional Pedagogic Center serves the system on a town-wide level, and the Council's Education Division is responsible for both formal and informal education. On the political level, the Council has, as one of its subcommittees, an Educational Committee, and the Council itself, whose head is a very involved partner in the decision-making process in everything bearing on the educational system.

The elementary schools are governmental schools operated by the Ministry of Education, while the high school is overseen by two agencies - the junior high under the auspices of the Ministry of Education and the high school, by the "Amal" network (of vocational schools) and the Local Council.

Arabic is the language of instruction. Only 65% of the teachers in the elementary schools are local (from Tel-sheva and the Bedouin towns in the surrounding area), while in the high school, the rate is even lower - only 44% The rest of the teachers come from the north of the country. Until now, the system has been dependent in many senses upon the Arab population in the north, for teachers, books, the schools to which the better students go, and more. The supervisors in the sector are also Arabs, and this division is maintained to the highest levels in the Ministry of Education. The instruction in Arabic creates in practice a separate educational system whose connection with the Jewish system at the various levels is tenuous, in spite on the feet that they function out of the same office.

Identifying the Needs

The town is included in the "30 cities" project because the level of its educational achievements is low, in terms of a low number of students receiving certificates of matriculation (4%), and a high percent of students finishing the elementary schools not knowing how to read and write (42%). The purpose of the project is to reduce the number of illiterate students, and to increase the level of educational achievements for the entire student population.

The project began its activity in the town in September 1994. The Evaluation Unit did a comprehensive survey to identify needs, which it published in a report which stresses the following points:

1. The educational system in the town is developed and operational. Its self-image is low in the eyes of the teachers, the parents and the community.

2. The kindergartens are attached to the schools and serve as an avenue to it. For most of the children, the kindergarten is the child's first encounter with the formal educational establishment. The kindergarten teachers demonstrate warmth with the children and spend most of their time teaching rudimentary skills and enrichment of the children as preparation for first grade.

3. The system as a whole is characterized by a very heterogeneous student population, and a leek of dialogue between teachers and students, and principals and teachers. The system of relationships is authoritarian, the communication is linear, and the use of physical force to instill discipline is commonplace The educational method is frontal in most classes, with an emphasis on repetition, an absence of development of student's thinking at the higher levels, an absence of legitimization and encouragement of questioning, a lack of opportunity and invitation to personal choice, even partial, in the matter of learned material. The teachers teach mostly with text books, rather than with an educational program.

4. There is a lack of day-to-day equipment, books and libraries, nature-study rooms, music rooms, a gymnasium, and a dependent relationship between the schools and the Council in terms of budget.

5. Special education is in its infancy. The entire system is comprised of only three special ed, classes. A psychologist and services are lacking in the field. The lack of awareness in the general population as to the need to treat such matters is high.

6. The central problems of the system are: low achievements, disciplinary problems, vandalism of property, verbal and physical violence, and a high drop-out rate.

The reasons given for this are:

1. A shortage in the professional system, where new teachers are at times not certified. This promulgates a vicious cycle of low achievements in the local school producing teachers trained at a low level who again repeat and maintain the current situation.

2. There is an unpreparedness of the students who reach the schools stemming from their lack of experience with the important areas of study. And there is a great difference in this area between the populations of students, especially between the students of the towns and those coming from the dispersal. Population of the classes with non-standard students for whom the system has no solution.

3. There exists a lack of communication and support of the parents for the schools, and a lack of clarity in the eyes of the parents regarding the importance of education and learning.

4. Political involvement in the managerial and functionary appointments in the schools interferes with work according to professional pedagogic standards.

The report was presented to the administration and the head of the Council, and a meeting was held with each of them in order to receive their feedback. The feedback included comments regarding inaccuracies in the statistical findings, phrases which were perceived as being drafted in an offensive manner, and subjects that were important to stress or were inappropriately raised. Each of these points was rethought and those things which were considered justified, and did not effect the objectivity of the report, were corrected. The data so collected in this fashion became the basis for determination of the goals of the intervention.

This process of presentation of the material to the population in question before it was published, and consideration being given to sensibilities and positions, created a confidence in the intentions of the interveners, and opened the way to cooperative activities of evaluation as an integral part of the project.

GOALS AND RATIONALES OF THE INTERVENTION (Goals of the Project at a Declaratory Level)

Raising the level of achievements and the degree of accomplishment in the educational system in Tel-sheva, while considering the duality of the environment in which it functions.

1. Improvement of the students' achievements.

2. Professionalization of the system.

3. Making sure that the system will maintain the achievement and the project is over. advance even after the project is over.

The goal for which the project is being undertaken in the town is that of improving student achievement. The project chase professionalization of the system as the main way to achieve these goads out of the assumption that the administrators and teachers are the most accessible and most willing sector to undergo change, on the one hand, while being the strongest sector in the system which can lead the change, on the other.

The third goal of the project, preservation of the effect, marks awareness of the need to establish a "successor" - a leading body within the town that can see the problems at a systemic level, and will know how to cooperate with the various relevant bodies in the town to maintain the achievements and to continue the progress.

PRINCIPLES GUIDING THE INTERVENTION

The process of change is similar to the insinuation of the minimum necessary number of gears into a working machine, in order to improve the character and quality of the finished product. This is relatively easy when one talks of a machine, and even that, on the assumption that the intervening "mechanic" is familiar with the machine and its parts. It is a difficult thing when the intervening "mechanic" does not know the machinery with which he is working; all the more so when we are talking of intervention in a human system.

The intervention strategies undertaken by the project stems in part from the fact that the interveners are coming from a different society than that in which they will be working, in part from the professional concepts of the interveners regarding the most promising conditions for introducing change and preserving that change, and yet another part of the strategy, is derived from the professional concepts of the intervener regarding the manner in which the professional educational system should perform.

I. Strategies undertaken deriving from the differences in society between that of the interveners, and that of the community in which they are working:

   a. An ongoing process of learning the society in which they are intervening, learning from four main sources: theoretical study, from written sources and persons who have studied or know the society; directly from the population, and learning through the integration of constructive evaluation.

   b. Building a partnership and joint responsibility between the intervener and the population in which s/he intervenes for the purpose of advancing the project.

   c. Entering into the intervention with a concept of experimentation and wonder regarding the structure of the intervention, its content, its stages, and an openness to options and alternatives, where the intervention is a result of the learning process, the professional concepts and the contribution of the population in which they are intervening.

   d. The declaration that the interveners will be working with the existing population of administrators and teachers, without attempting to replace them in order to professionalize the system.

II. Strategies arising from professional concepts of the intervener as to the most promising conditions for introducing change and preserving it:

   a. Introduction of change

      1. The introduction of change is effective when it takes place within a group framework. The group provides a framework of relatedness, belonging and support.

      2. An effective process of change includes cognitive learning of the content and processes, and is accompanied by an emotional involvement which necessitates support.

      3. The process of change is based on an assumption of the existence of unrealized ability and the existence of the will and willingness to change.

      4. The organizational concept - The introduction of change into organizations has to begin with the organization's administration and to take into account the organizational culture.

      5. Modeling - One of the ways of introducing change is through modeling: active examples of the expected behavior.

      6. Marketing - Presentation of the change to those outside as a method to bring the system to professionalize and to raise its self-image.

7. Each individual's time - Legitimization of each participant's joining the process of change in his/her own timing, pace, and in the directions that s/he chooses.

8. The introduction of change is a spiral process - One begins with concrete points which are perceived as needing change, where the method of treating these points is through postulation of a principle, and then applying the principle to all the areas touching upon, or related to them. This is a spiraling step-by-step process - the first stage is concrete; the second is postulating the principle; the third can be seen in application of the principle postulated to the problem, and then to new area.

b. Preservation of the change

1. A holistić approach reflects recognition that the system is a whole made up of interdependent parts in such a way that a change in one part will cause a change also in the other parts. This necessitates that the intervention program include all the bodies affiliated to the educational system, and deals with creating coordination between all parts of the local system as well as with those systems surrounding, so as to direct them to mutual goals and pooled activities.

2. The existence of a "different drummer" - who standing outside the system can maintain the steady "beat" without being affected by internal circumstances, and so can serve as a model to keep the process "in time" throughout the entire time, such as connection to teacher-enrichment systems, a professional "escort" to accompany the process, etc.

3. Raising the professional caliber of the system from both the organizational and pedagogic standpoints, to achieve a more effective school.

4. The promise of available means, such as: budgets, good coordinators and counselors for venous fields.

III Strategies based on the interveners' professional concepts of the way a professional educational system should function:

a. Work according to effective principles - Professionalization of the system necessitates working by means of planning, implementation, supervision and feedback.

b. Organizational change - Transition from a structure which serves an administrative concept to one which serves a pedagogic concept. Including team work, delegation of authority, democratization of the system and placement of the needs of the child at the center of any activity.

STRUCTURE OF THE HOLISTIC INTERVENTION

The intervention will include:

a. At the school level: Work within the school on developing the organizational structure, improving the professional level of the administrators, coordinators, educators and teachers, and following the progress of the students in Arabic and arithmetic, and concern that the professionalization of the system should improve the students' achievements.

b. At the inter-school level: Work with the group of administrators in an attempt to turn them into the leading force in the educational system in the town. It should be a body with a comprehensive, agreed-upon and joint outlook regarding the needs of the system, and whose responsibility is to deal with the realization of these needs.

c. At the town level: Work with the head of Education Division, the head of the Council. the various supervisors and the parents to create coordinated goals and a pooling of resources. And the establishment of a town-wide steering committee in which framework the coordination of activities should take place.

Strategies for the Introduction of Change: The Administrators' Group

Within the context of this article, we have chosen to describe in a detailed fashion the work being done with the group of administrators, as the body connecting the three levels of intervention, and to exemplify by its means some of the principles of the intervention.

a Introduction of change as a spiral process

The first body established was the Administrators' group, which included principals of schools, the head of the Pedagogic Center and the head of the Education Division. In the beginning, the group was established by the director of the project, as a method to create a framework in which to have mutual learning and to deal with problems common to all the schools. The concrete problem raised was the need to end the day-to-day dependence on the Council in questions of budget and supplies. The solution raised was to give the administrators control of the budget, and through this, to begin the process of professionalization.

Budget management by the school principal mandated the principals recognizing the scope of the budget and its sources. Each principal had 2,000 New Israeli Sheqels (NIS) toward building the infrastructure for the new learning methods, an ongoing 55 NIS/child, and a 50 NIS/child fee to be collected from the parents For the first time, the principals had to deal with the question of what, where and why to buy, a process which required them to consider and check alternatives. Some of the principals recruited parents to hang carpeting, and so saved on expenses. Others located inexpensive sources for the same merchandise. One of the principals limited private phone calls made at the school, out of the understanding that money so saved could then be used for other purposes.

This dealing with the budget helped instill a more professional attitude in the administrators, in terms of effective management, through the taking of responsibility. They were required to present plans against which they received their budgets, implementing them while considering options and using Judgment - and at year's end, they were called upon to report before the Council as to what had actually been done with the budget - which necessitated their developing credible methods of follow-up.

This education in effective administration was then applied in other areas, such as: school administration, publication of a newspaper, joint projects management, and more.

Introduction of this change in a "spiral effect" says, then, that one begins with a concrete problem, and solving that concrete problem teaches a principle which is then applicable in other areas, while at the same time deepening one's knowledge of and experience with it.

b. *Preservation of change through a holistic approach*

At the close of the year, it turned out that the principals had collected less money from the parents as an educational fee than in the previous year. The Council determined, in this light, the new ruling that the schools current budget be conditional to parental participation. For each sheqel collected, they would receive a sheqel. This position was not acceptable to the principals, since the socioeconomic situation of the parent population differed in each school. In light of the position taken by the principals, it was agreed to table the subject, and discuss it again later.

In this instance, the principals acted in concert, raised problems and tried together to find solutions, and were prepared to challenge the Authority on it. For the first time, at these discussions, pedagogic issues were raised at the town-wide level, such as, for example, whether services should be offered to the residents free-of-charge, or whether they should be educated to pay for service. From these examples, it is possible to see that the Administrators' group created a meeting and dialogue between the three levels - town-wide, inter-school, and within the individual schools, and as such, led to a degree of professionalization of the entire system because it demanded the agreement on norms which take into account all the participants. This work demonstrates a holistic approach, which, if it works, could assure preservation of the change.

c. *The Group as an Effective Framework for Introducing Change*

1. **Leadership Workshop**

Change is a social process created within a group. It includes content, cognitive learning processes, emotional change and the need for support. There is no way to force change. The first step in change is to bring people to say "I want it". The second step is participation in the decision-making process in order to create commitment to the change. The third step is strengthening the commitment to change by means of a program of benefits In the course of the process one must develop a conscious vision, as a guide, to the activities of the people, the ability to admit to difficulties and seek help, and to learn to control one's resources. A central tool for introducing the processes of change is to set up a role model.

Part of the work with the administrators' group was done within the framework of a workshop with an organizational consultant. The goals of the work were: developing a close acquaintance between the principals to create a trust and common language, learning conflict-solving techniques, and above all else, building an affiliated group to serve as a supportive framework in dealing with the implementation of the new norms within the system.

The theoretical material learned in the workshop with regard to effective management was accompanied by work done over the course of the group's meetings with the project director, and in the administrators' work with the moderators at the school. From this experiment, it was learned that if the implementation in the schools is not "accompanied", they are not realized.

II. Participation in the decision-making process

During March everyone was involved in determining goals for the intervention, its content, and the choice and consolidation of the moderating team. The questions which were used to formulate these goals were: "If you had in hand the best possible program, what would you solve"? "What bothers you the most"? "To what would you like to find a solution"? "What are your fantasies"? Although these questions might seem to overlap, they in fact generated different answers. Part of the questions were discussed at length, while on others, the group heard written thoughts of the moderators on the questions. The process did not end with a determination of the goals. It was more of an introduction of the administrators with what the system lacked, and what needs to be done to deal with these deficiencies. The terms: responsibility, autonomy, responsibility taking, team work, improvement of the school's self-image, concern of the staff for the students, "marketing" the school, nurturing the professional staff, choice of teachers according to ability rather than connections, compensations, delegation of authority, the connection between involvement in determinations and responsibility for their results, leadership, development of dialogue, and the centrality of the student, all came up without in-depth discussion or their correlation to operative programs, and without obligation of any kind. The cooperation of the principals operated to create trust, assure that the determined goals match Tel-sheva's educational system, and built the principals' responsibility to the process The discussion of these within the group framework built the group as a coherent leading body, which together weighs problems of the system as a whole, with a responsibility to lead, in a unified fashion, toward implementation of the solution.

III. The group as the fashioner of norms for the system

The norms governing time-management in Bedouin society are different than in Western society. In Bedouin society, a person is expected to be ready to welcome guests, visitors and the like at any time that they might arrive. This social custom at times breaks into the area of work. From the first meeting it was made clear and decided in the Administrators' group that the time of each following gathering would be determined at the preceding one, and that it would be the responsibility of each individual to attend without being reminded. At the beginning of the meeting the fact was noted that each of them had in fact met the task and arrived at the appointed time and place. A person who had to miss a session would take the trouble to call and advise that s/he would be absent. And, at the end of each meeting, it was noted that the meeting had adjourned on time. Every meeting scheduled, save one, was held as scheduled.

Another norm which was jointly decided upon, and which was a professional norm decided upon in order to change an accepted practice, was the norm of assigning kindergarten children to heterogeneous first grades, without allowing the parents to intercede in the assignment. The group became a supportive body in implementing the decision - serving as a new affiliation for the principals; a professional affiliation, rather than a family affiliation.

d. Marketing

The idea of putting Tel-sheva's educational system "on the map" raised the idea of marketing the system outside, out of the belief that opening the system could serve as a lever to its advancement. In the four month period, five activities were undertaken.

The first idea on this tack was publication of a newspaper of the educational system. An inter school steering committee was established, which studied in-depth the role of the newspaper, its goals and how to make sure that it would remain politically neutral within the town, and serve to market the schools to the community and environs The first paper was published in March 1996, of a caliber that, in appearance, could rival any national paper in the country. The quality of the paper, the pictures and the editing were excellent The newspapers were distributed to parents, council members, and to the Bedouin schools and principals in the area. The feedback was very positive.

The second exposure was a visit of representatives of the national "30 Towns Project", which included a get-together and tour of the schools. Organization of the visit required the schools to think of an effective way to present their achievements in a short time. Each school decided on its own way They published pamphlets and photo albums testifying to the change. At the end of the visit was a meeting of representatives of the schools of the Bedouin sector taking part in the project, where they presented the various methods to promote the achievements. The local reading readiness team revealed a strong sense of affiliation, and presented its methods honorably, as well as asking very apt questions regarding other method presentations.

Third, a joint trimester opening for all the schools, which included remarks and a play showing the relationship between a Downs' syndrome boy and his healthy brother. The audience spoke with the Downs' boy, having been asked to turn and speak to him The experience was a powerful one, and especially in this sector.

The last of the tasks was an entrepreneurship conference. A combined exhibition for all the schools in the auditorium of the high school, it was intended to exhibit the pedagogic work which had been done over the course of the preceding year

The marketing activities bore various fruit

Improving the standard of the Administrators' group professional functioning in its successful manipulation of the whole of the educational system - including getting budgets, keeping to a timetable, creating a combined framework, assigning Jobs and coordinating.

Creation of a sense of belonging and team pride. All these activities were undertaken under pressure to represent the school versus other schools - a fact which drove the teams within the schools to work together in order to create and present themselves in such a way as to allow themselves to feel proud of their school.

Acquaintance: The exhibit opened the schools up to the population of the staff of the other schools, who visited, presenting their achievement, as well, to Council members, parents and children -turning the schools into one network. Positive responses were received from principals in neighboring schools who heard and saw part of what had been done.

The most important result was the elevated self-image of pupils, teachers and principals alike.

This process of working at a town-wide level had an unexpected result - the political intervention of the head of the Council in what was being done. In terms of the newspaper, the head of the Council demanded that the steering committee be dispersed, and be replaced by the principals. The initiative to set up an "Arab Book Week" in the town was vetoed by the head of the Council. These activities raised the question as to how one raises the professional level of the system in the town when you have no formal mandate to do so. The difficulty was in the style of intervention, which raised a question regarding the fundamental ability to lead to change toward greater democratization and the introduction of professional pedagogic consideration into the actions being taken. The head of the Council made demands without reasons given. The demands were not raised before the town-wide steering committee, were not brought for discussion, and it was impossible to negotiate about them.

The head of the project raised the problems before the group and tried to think together with them about what could be done. Out of these discussions it was learned that here, political, cultural, professional and familial variables all play a part. This question is still open and no solution has been found.

e. Constructive evaluation

The Evaluation Unit accompanied the project while constantly redefining the situation, the difficulties and the options for solutions. Most of the work done was to serve the team of interveners. The group of principals received a report identifying needs, intermediate reports, and summarizing reports, and were asked to respond to them. (In the third year, the principals' group is being asked to write the reports based on questions of the moderators, as a way to strengthen their level of professionalism.) The reports reflected to the principals the processes and results of the activities of intervention.

NOTABLE ACCOMPLISHMENTS AND DIFFICULTIES

ACCOMPLISHMENTS

1. The greatest accomplishment achieved by the project was the cooperation, trust and recruitment of the administrators, and a not insignificant number of the teachers, to the process of change.
2. One can feel the existence of a common language developing and being heard among the various schools, such as: the credo of the school, delegation of authority, team work, planning, determining goals and parameters for assessment, and the urgent need to reduce the number of students who do not know how to read or write.
3. There are structural changes in the system which are evidence of a transition from an administrative concept to a pedagogic concept of the school, such as: establishment of a pedagogic committee in the elementary school, scheduling free periods to permit teachers of particular disciplines to meet, and the development of leading local teams of teachers in the major disciplines, mainly Arabic.

4. An evaluation of the self-image of the teachers and principals.
5. System-wide work on the inter-school level guided by the Administrators' group as the leading force.
6. Involvement and care of the head of the Council in what is being done within the system, and his willingness to contribute.
7. Cooperation between the various supervisors and the project.
8. Recognition of the Ministry of Education in the project's accomplishments, as expressed interest in turning the project into a model for intervention in Bedouin towns.
9. Consolidation of a group of moderators who see in their work in the town a challenge and also, in some measure, a humanitarian mission.
10. The acceptance of evaluation as an integral part of the work of the moderators and administrators.

DIFFICULTIES

1. The project faces the unique problem of intervening in a society which differs in three respects: a different value system, lack of mastery by the interveners of the Arabic language in which the system operates, and the need to fit cooperatively into a system already in operation. These difficulties will continue to accompany the project, and the work in the field will prove to what degree they are obstacles.

2. The method chosen for the intervention is time consuming, and only at the end will educational achievement be evident. It is possible that the project will leave the town without visible evidence of the hoped-for changes, a fact that will fuel the detractors of the project to cancel or dismiss its accomplishments.

3. One of the central mechanisms for preserving the effect was the work on a systemic level, which will promise the continuation of the work in the direction dictated by the project. However, this is not guaranteed, as, on the town level, the political elements are at the forefront The steering committee is not a strong enough body, and the head of the Council and the head of the Education Division function according to criteria which do not promise the development of democratic or professional relationship within the system.

CONCLUSION

Through a description of the work of the Administrators' group, we have demonstrated the principles of intervention. A detailed description of the activities of intervention appear in the reports "The First Year of Activity" and "The Second Year of Activity", presented to the ministry of Education.

The uniqueness of the project lies in:

1. The work with a concept which is open to change.

2. The accompaniment of the project by ongoing constructive assessments.

4. The development of a cooperative relationship between the interveners and the population of the project.

HENRY GURNEY REFORM SCHOOL RESIDENTS PERCEPTION OF CRIMINAL ACTS AND PREVIOUS SCHOOLING: CONSIDERATIONS FOR SCHOOL REFORM

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INTRODUCTION

Crimes involving school children are on the rise. In Malaysia, figures for 1995 show that school children from ages 10 to 19 were involved in various crimes including thefts, vandalism, drugs, gambling, rape and extortions. School children involved in crimes are at risk, they leave school early, they either get caught and sent to reform schools or go undetected and cause problems to the school and society. At risk children are those who have potentials to dropout of school due to their family background, academic performance and other "push" factors that may influence them.

Schools exist for the noble purpose of preparing our young ones to become useful members of the society. Yet despite the advancement made in our educational system in terms of curriculum, facilities and teacher education, our schools still fail miserably in keeping at risk children in school and educating them to be useful members of the society. This paper will discuss findings from a study involving children sent to the Henry Gurney Reform School. This study was part of a bigger study* that looked Into public schools' children knowledge and involvement In criminal acts The main aim of this study on residents of Henry Gurney was to investigate among other things, the profile of student who were found guilty and sent to Henry Gurney Reform School. This is done to give an insight to the profile of problem children in school who may be at risk and who may one day end up in reform schools.

This paper will also discuss implications from the findings of this study and to some extent of the larger study, towards efforts at school improvement programmes.

The Study

The objectives of the study were to investigate the profile of children in the reform school, their perception of criminal acts and involvement while at school, their perception of their previous school, teachers and parents. The population of the study was 536 residents of Henry Gurney School, out of this 152 residents were sampled to answer our questionnaire. Twenty seven residents were interviewed in depth.

The main instrument used was a questionnaire. Personal records of residents, In depth interviews with residents and warden were also utilized.

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* This study involved 885 secondary school student from 16 schools in Kuala Lumpur and Petaling Jaya. Approximately 361 respondents were identified by their teachers as problematic i.e. they were involved in many discipline problems such as truancy, breaking school rules etc.

The Herny Gurney School

The Herny Gurney School is under the jurisdiction *of* the Director of Prisons Malaysia Children sent to this school are males, aged between 14-21 years old, found guilty of criminal acts and sentenced to imprisonment in this school. They are sent to the school for the maximum of 3 years. However the duration of stay can be reduced based on the discretion of the Director of Prisons. This school, which is actually a prison, offers vocational training and academic subjects for those who would like to sit for the national examinations at grade 8 and 10.

At the end of 1995, the number of residents were 536 children, 94% of which h have attended school. More than half of the residents (67.9%) have attended high school. About 26.49% of these children left school at an earlier age (at elementary level), and 51.49% left at junior high Approximately 71% of the residents are of school going age i.e. between 14 18 years old (see table 1 in appendix)'. 'All tables are found in the appendix).[1]

Profile of Residents

In terms of residents* socioeconomic background, 64.92% have parents earning below RM499. Approximately 17.35% were unemployed. This mean that a majority of the residents come from chronically poor families (see table 2). Our data pertaining to our respondents ' show that many of them come from single parent families. Only 57.9% of the respondents have both parents living together. A majority of their parents have elementary school education Before they were sent to Henry Gurney, less than half stayed with both parents, the rest stayed with either parent, relatives and friends (See tables 3a, b and c).

Crimes

Residents were sent to the reform school because of their involvement in various crimes. Crimes involving properties (thefts, vandalism, robbery) were the highest on the list, second was involvement in drugs followed by trespassing, rape, assault and kidnapping. (See table 4).

It is pertinent to note that in the larger study involving public school children, we found that children identified as problem children by [2]their teachers have similar profile. They come from poor families, and broken homes too[3]. The data of the larger study also revealed that discipline problems most rampant in schools were vandalism, thefts, fighting and assault. Acts such as bringing pornographic materials (such as videotapes) to school was also rampant. It is conceivable that if these problems are not arrested in schools, these children will try bigger things which will render them harmful to the society and they may eventually drop out of school or being tried in court and sent to prison.

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[1] All tables are found in the appendix.

[2] Residents – refere to residents of Henry Gurney Schools.

[3] Respondents-refer to residents sampled to answer questionnaires and for the indepth interview.

Respondents were given a list of acts identified as crimes by the Ministry of Education and was asked to identify which of these acts are crimes and which are not. Acts perceived as noncriminal by more than 20% of respondents were gambling, and vandalising school and students' properties. Approximately 40-60% respondents perceived that porno graphic materials and pictures, obsence gestures and using obscence words as non criminal acts. In fact most of the respondents incriminated for rape and molestation were not aware that sex with girls below age is a crime even though the girls were willing partners (see table 5 in appendix).

Findings from the larger study also showed that school children studied perceived the same acts as noncriminal acts. Yet these crimes (robbery, thefts, assault) at a more serious level may lead many school children to leave school early and get into trouble with the law. These findings have implications on what schools should do to increase students' awareness of the types of acts which are defined as crimes by the law. They also should be made aware of the consequences of these acts, if they were caught and proven guilty.

Knowledge of Occurrence of Crimes in the Previous School

Respondents were asked to list the types of crimes that they were aware of happening in the school they once attended. We also asked them to list crithey were involved in while still at school. Our findings show that 21% - 27% of respondents knew about the occurrence of gambling, stealing, extortion, drug abuse, and bringing of pornographic materials to school in their previous schools, a larger number of respondents knew about the involvement of school children in these crimes outside school (see table 6). Respondents also admitted indulging in criminal acts outside school; gambling (61.8%), thefts (42.8%) extortion (34.9%), member of secret societies (30.3%), drug abuse (38.2%), in possession of dangerous weapons and betting. It is disconcerting to note that these respondents were sent to Henry Gurney Reform School because they were found guilty of only one criminal act the data however show that they were involved in various crimes while still at school. This means that their criminal behaviors went undetected by the school and other significant others.

Data from the larger study also showed that children still at school admitted that they were involved in gambling thefts extortion threatening teacher and prefects involved in drugs and beating up other children vandalism and necking. Yet school discipline records did not capture these varied discipline problems. Much need to be done to keep school more aware of students' problems and to nip them in the bud. (See table 7)

Involvement of Friends and Relatives in Crimes

Quite a number of respondents reported that their friends or families were involved in crimes; these include their brothers (31.4%) uncles (15.7%) cousins (21.6%) and neighbours (36 5%).

Feelings about School

Respondents responses to the statements about their previous school was interesting. Approximately 69.1% respondents chose the statement "I love my school" and 51% of respondents chose the statement "I like most of my teachers in school" Things they liked most about their previous schools according to responses to our open ended questions were co-curricular activities.

There were some negative statements chosen by respondents to portray their feelings about school. About 39.5% felt that they never enjoyed school, 35.5% never enjoyed studying, 46.7% chose the statement 'school rules are too rigid', 'always felt forced to attend schools' (35.5%), 'do not like to ask teachers for help' (50%), 'hate prefects' (42%), 'hate most teachers in school' (34.9%) and 'teachers indulge in favouritism (33.6%) (see table 8)

Things they disliked about school were, heavy bags to be carried to school, lengthy periods, too much homework and extra classes. They disliked mathematics, history and geography They prefer arts (drawing) but that subject was not offered in their school.

We asked them about things they would like and dislike their schools to be. Respondents like schools to provide more co-curricular activities, more facilities such as computers and workshops. They share the same opinion with the children still at school in the larger study in their expectation of teachers and school Respondents from both studies would like their teachers, principals and prefects to be firm, responsible and fair, to have good friends,their teachers to be skillful in teaching, the school to have beautiful and clean environment, good facilities such as libraries and resource centres (see table 9a).

They dislike principals, and teachers and prefects who are overly fierce, unfriendly and unfair, and who like to criticise unfairly.

They dislike unfair discipline teachers especially. Teachers who do not put much effort in their teaching who are boring and who fail to attend classes are disliked by these children. Small and dirty schools, with filthy toilets, long assemblies, strict rules, noisy students, fighting among students and 'bad' students are disliked. Schools with poor facilities and too little emphasis given to co-curricular activities are not favoured by respondent from both studies (see table 9b).

These opinion about schools are valuable insights to us educators as to what our children expect of their school. Children in reform school, problem children in public schools as well as normal children share the same opinion - they want good teachers and principals, they want a conducive and orderly environment and they want fairness with regards to rules. What they want and what we adults want are not in conflict. The Question Is why are there still 'bad' teachers and principals and 'bad' school environment?

What is interesting from the findings above is that, despite the shortcomings of their schools, they (respondents in Henry Gurney) still regard it as a place to obtain knowledge and to succeed. They love their schools yet they dropped out and flaunt the law. A lot need to be done by the schools especially in terms of meeting the specific needs of these children. Teachers, the curriculum, the school site and the overall culture of the school need to be made relevant and conducive for the healthy development of these children.

Push Factors

From the in-depth interviews we unraveled some factors which led respondents to indulge in crimes. We found that they come from poor families, single parent homes, broken homes and parents fighting with each other. They live with their elder brothers, sisters or other relatives Their friends were older (more than 21 years old) and dropouts. They have brothers and other relatives in jail for committing various crimes.

Respondents attribute their involvement in crime due to influence of friends and adults, revenge, to get extra money, in need of money, urge to try (drugs), drawn as accomplice to others and willingness to be 'bad'.

These respondents left school early because they failed in school, could not afford to continue schooling, or were sacked from school due to indiscipline.

Respondents Opinion

Majority of respondents felt unhappy, remorseful, and frightened when they were first sent to Henry Gurney. They however blamed themselves for the situation they were in. When asked what advice they would give to other children, they stressed that children should listen to advice, think carefully before they do thing they may later regret, to be careful when choosing friends, and to indulge In beneficial activities They advised that children should be given moral and religious education, have knowledge regarding law and criminal acts, and counseling services should be made available to them.

Regarding our question as to how schools can be made into a better place for teenagers, respondents gave some meaningful insights. They suggested that schools should have rules, but these rules should not make life difficult for students. They stressed that teachers should use more effective methods of advising students, teachers should be caring and act as parent surrogates, religious education should be stressed and more emphasis should be given to co-curricular activities.

It is comforting to note that children such as these can show a lot of wisdom in their thoughts. When we were with them in the course of our study we found that despite the 'bad' things they have done they were actually sweet children who need much love and care as 'normal' children. We felt that whatever happened to these children, can easily happen to our own children if not enough care and support are given to them. These Findings have implications on our efforts at school improvement programmes.

Implications and Recommendations

Our findings have given us an insight to the profile of at risk children, their perception towards school and their knowledge of criminal acts and involvement in them while still at school. We found that a majority of these children come from poor families and were products of broken homes. They were generally positive about school in terms of what it can offer, they however have opinions about what they like or dislike about school.

We also found that these children were involved in various criminal acts while still at school and knew about incidences *of* crimes in their previous school as well as outside schools. We discovered that 'normal' students in the public schools are also indulging in these acts' end knew about its occurrence in and outside theirschool. Both types of respondents perceive certain criminal acts as non criminal. Respondents in Henry Gurney even though much wiser after being committed, still considered certain crimes as non crimes.

Our findings also revealed that residents in Henry Gurney have very few councillors at their service, and in public schools councillors are burdened with teaching Jobs as well. In terms of religious and moral education Henry Gurney need more religious teachers as respondents themselves feel the need to be guided spiritually in order to be better persons.

Our general observations of school suggest to us that the overemphasis on academic performance and examination results render school 'unsympathetic' to at risk students. This makes weak students feel marginal in school. They perceive that schools may be relevant to others but not relevant to them. Schools usually place these student in the weaker classes where they receive minimal attention and education.

The culture of the school generally put little emphasis on at risk students, if they do, it is more in terms of negative expectations, control and punishment Teachers generally feel helpless and give up on these students. Our observations suggest that there is a tendency for schools not to keep updated discipline records, preferring instead to 'sweep things under the carpet'. We read (in the national news papers) of at least a couple of schools which their very weak students from sitting for the national examination at the elementary level, fearing that these students would tarnish their examination results. In one school which we visited during the course of our research, we could not find 'problem' students in the school. The principal explained that he has advised these students to stay away from school so that they would not disturb other students who were preparing (revising) for a national examination. Many schools organise extra classes for bright students during the school holidays in order to prepare them for national examinations, while Meweaker was stay home and play.

Every year, a number of schools, teachers and principals are given recognition as 'excellent' and are conferred awards. However no study has yet been done to investigate how 'at risk' students fare in these schools.

In an earlier study on parental involvement in schools, we found that schools played a minimal role in helping parents play a bigger role in their childrens' education. It is conceivable that in order for school reforms to really work, the yardstick has to be measured in terms of the improvement and well being of all students, especially at risk children. The Ministry of Education's quest for zero defect In school is a step towards the right direction provided principals, teachers and parents really understand its true meaning.

Based on the above scenario, we would like to put forward the following recommendations:

1. The culture of the school need to incorporate into its goals, the overall improvement of at risk children. This means that

    a. Teachers should be trained specifically of terms in how to teach and treat these students. This means that the teaching and learning process should be interesting, enriching, stimulating and relevant. Drilling, rote learning note giving, typical of teachers' approach in the teaching and learning of weak students should be avoided. Teachers should also be positive and encouraging.

b. Schools should reach out to parents of at risk children, have specific programs and work shops to help them increase their parental skills, and give pointers on how to encourage their children academically and help them overcome their personal problems by referring them to the relevant authorities.

c. Schools should invent a screening device to detect at risk children, in order that proactive programmes can be undertaken to 'nip' their problems in the bud.

d. Practices such as streaming, and other practices which differentiate unfairly should not be encouraged.

e. A'school watch' system should be instituted with the help of police, and the neighbourhood to discern unwanted elements which may be prowling the schools and influencing students.

f. There should be liaison officer that takes care of truants, visit their homes and give help where needed. Absenteeism should be discouraged even at the lower grades.

g. At risk children should be given activities to fill their time. Community work, camps, workshops and weekend jobs can help them build their characters and become useful members of the society. Schools can elicit help From the police, hospital, and other public serving agencies.

2. Schools should expose students to the law regarding crimes. This can be done by posting information on the bulletin boards, role playing, enlisting the help of friendly policemen who can deliver interesting and relevant information.

3. All school should have full time councillors and all teachers should have councelling skills.

4. Sex education need to be seriously considered and implemented. Conclusion It has to be relevant and sensitively handled.

5. More co-corricular activities, chosen by students themselves need to be offered.

6. Curriculum should be enriched by including arts and crafts, music, drama and theatre- weak students find these activities interesting and non threatening.

7. A shift in paradigm in schools, is warranted where the overall development of children should be the focus. Various teaching strategies including cooperative learning, peer teaching and team teaching should be stressed in order that students' academic and social skills are enhanced.

CONCLUSION

Ideally, schools such as Henry Gurney should not exist. However since an institution like this is needed in our fast moving society, much help and support should be given to them. Councillors, visits from concerned groups and individuals, moral and religious education are priority needs in Henry Gurney. Public schools need to 'purl' and keep students in school, while Henry Gurney's aim is to push them out reformed. Both schools and institution like Henry Gurney cannot do it alone, they need a lot of help from all levels of society to succeed.

References

Sharifah Md. Nor, Norbani Nazeri, Md Khalil Ruslan (1995). Profile of Henry Gurney Residents, Teluk Mas, Malacca, Research Report, MOE, UM, UPM.

Sharifah Md. Nor, Norbani Nazeri, Md. Khalil Ruslan (1995). A Case Studs. of Misbehaviour and Discipline Problems in Urban Secondary Schools, MOE. UM, UPM.

Jennifer Wee Beng Neo, Sharifah Md. Nor (1995). 'The Role of Schools in Soliciting Parental Involvement', unpublished thesis submitted for Masters in Science and Education, Universiti Pertanian Malaysia.

Appendix

Table 1:
Educational Level of Residents in Henry Gurney School

Level of Education	Total	%
Never been to school	31	5.78
Grade 1-3	23	4.29
Grade 4-6	119	22.2
Form 1-3	276	51.49
Form 4-5	86	16.23
Total	536	100

Table 2:
Distribution of Parents Income (Residents')

Monthly Income	Total	%
Unemployed	93	7.35
Less than RM250	14	2.61
RM250-RM499	334	62.31
RM500-RM749	77	14.36
RM750-RM999	8	1.49
Over RM1 000	10	1.86
Total	536	100

Table 3a:
Family Situation of Respondents

	Total	%
Family Situation:		
Parents staying	88	57.9
Together	22	14.5
Divorced	22	14.5
Father deceased	10	6.6
Parents staying apart	10	6.6

Table 3b:
Henry Gurney, respondents lived with:

	Total	%
Parents	74	48.7
Father	11	7.2
Mother	25	16.4
Grandmother	8	5.3
Hostel	4	2.6
Friends	20	19.7

Table 3c:
Parents' Level of Education (Respondents')

	Father	%	Mother	%
Never been to school	11	8.1	15	11.3
Primary School	56	41.2	62	46.6
Lower Secondary	28	20.6	21	15.8
Upper Secondary	25	18.4	21	15.8
Pre-university	5	3.7	5	3.7
College	1	0.7	5	3.7
University	7	5.1	2	2.1

Table 4
Types of Offences Committed by Henry Gurney School Residents as of March 1995

	Community	Malay	Chinese	Indian	Others	Foreign Residents	Total Offences
	No. of offenders	375	66	80	3	12	536
1-	Abetment		1				1
2-	Offences against public tranquillity	2	1	1			4
3-	Offences against public officers	2 3		1			3
4	Giving false evidence	1	2				3
5	Culpable homicide	2	3	2			3
6	Causing, hurt	4					7
7	Assault and criminal force		5				4
8	Kidnapping and abutment of	14	2	1		2	5
9	Rape	1					19*
10	Unnatural offence	76	5	13		1	1
11	Theft	19	5	5			95*
12	Theft in building		1	1			29*
13	Exortion	11	4	2			2
14	Robbery	1		3			17*
15	Robberry and causing hurt	10	3	6		2	4
16	Gang robbery	1		1			21*
17	Robbery and casing death						2
18	Armed robbery – attempted grievous hurt / attempted murder	9	1	1			
19	Conspiracy to commit gang robbery	1					11* 1
20	Misappropriation of property.		1	1		1	2
21	Receiving stolen property	24		3			28
22	Cheating involving property	3	3				6
23	Mischief	1				1	1
24	Trespass	55	6	5	2		69
25	Annoy, disturb		2	1			3
26	Attempt to commit an offeence	2	2	2			6

27	Committing a crime using false weapons	3	3	5			11
28	In company of a person in possession of weapon.						
29	Possesion of opium /ganja	26		3	1		37
30	Possesion of all kinds of drugs	15	7	6	2		24
31	Misuse of drugs (own use)	1					1
32	Possession of morphine/raw opium				1		1
33	Trafficing of dangerous drugs		1			1	2
34	Other offences relating to drugs	13	4				17
35	Offences under Restricted Residence Act.		1				1
36	Offences under the Minor Offences Act.	3	1	1			5
37	Other offence (under any other Act.	75	3	17			97
	Total	378	68	81	3	13	543

Source: Henry Curney School, Melaka

Table 5
Respondents' Perception of Crime

	Type of Crime	Light		Heavy		Crime		Noncrime	
		Tot.	%	Tot.	%	Tot.	%	Tot.	%
1.	Damage on students' property	84	59.2	58	41.0	45	34.4	86	66.0
2.	Obscene Drawings And writings	55	38.2	89	62.0	53	41.0	78	60.0
3.	Obscene Words and gestures	57	40.0	87	60.4	54	41.0	78	59.1
4.	In Possession of Pornographic materials	28	20.1	111	80.0	78	60.0	52	40.0
5.	Damage on Hostel Property	32	23.0	102	72.3	84	64.0	48	36.4
6.	Damage on Canteen Property	32	23.0	107	77.0	91	68.0	43	32.1
7.	Damage on Principals' propoert	22	16.0	118	84.3	95	71.4	38	29.0
8.	Gambling	33	23.4	108	76.6	105	75.0	36	26.0
9.	Demonstration	26	19.0	113	81.3	97	74.0	34	26.0

Table 6
Awareness of Occurrence of Crime inside and Outside School

Type of Crime	Inside	School	Outside	School
	Total	%	Total	%
1. Gambling	41	27.0	119	78.3
2. Theft	42	27.6	93	61.2
3. Extortion	37	24.3	79	52.0
4. Misuse of drugs	32	21.1	69	45.4
5. A member of sector society	19	12.5	67	44.1
6. Necking	34	22.4	65	42.8
7. Beating	44	28.9	62	40.8
8. In possession of dangerous weapons	26	17.1	60	40.8
9. Trafficking in drugs	46	12.5	57	39.5
10. Cheating involoving money	47	17.1	55	37.5
11. Threatening prefects	16	30.3	55	36.2
12. Threatening teacher	18	30.9	54	36.2
13. Betting	48	10.5	50	35.5
14. Threatening	21	11.8	49	32.9
15. Bullying	36	31.6	41	32.2
16. Cheating	44	13.8	40	27.0
17. Possession of pornographic materials	9	23.7	40	26.3
18. Damage on student property	28	28.9	39	26.3
19. Rape		5.9	34	25.7
20. Damage on teacher property		18.4	34	22.4

Table 7
Criminal Acts

Henry Gurney Reform School (1 994)	Discipline Record Schools (1990-1994)
Thefts	Physical hurt
Break ins	Gambling
Drugs	Thefts
Rape	Vandalism
	Pornographic materials/acts

Perceived as noncriminal Acts by more than 20% of respondents in Henry Gurney Reform School	Perceived as non criminal Acts by > 30% respondents in Public Schools.
Obscene acts and pornographic materials vandalism (destroying gambling schools and personal properties)	Threats vandalism porno graphic materials gambling

Table 8
Respondents' Perception Towards Previous School

	Statements	Total	%
1	I love my school	105	69.1/
2.	I hate my school	21	13.8*
3	The school rules are too strict	71	46.7*
4.	The school rules are not strict	65	42.8/
5.	The teachers are fair	75	49.3
6.	The teachers are unfair/Indulge in favouritism	51	33.6*
7.	I like the teachers	78	51.3/
8	I hate most teachers	53	34.9*
9.	The students are disciplined	51	33.6/
10.	Many bad students in the school	81	53 3*
11.	I hate most prefects	64	42.1*
12.	I am not comfortable studying in the school	42	27.6*
13.	If I have a problem, I do not like to get the teachers' help	76	50*
14.	If I have a problem, I prefer to go to my friends for help	75	49.3*
15.	I always feel that I'm forced to go to school	54	35.5*
16.	Have never enjoyed studing m school	60	39.5*

Table 9b
Things they dislike about school

1.	**Strict teachers**
2.	Unfair
3.	Discipline teachers
4.	Strict School Rules
5.	Noisv Schools
6.	Assembly
7.	Dirty/Small school
8.	Bad students
9.	Students Fighting
10.	Very little emphasis on co-curricula activities.
11.	Filthy toilets
12.	Dirty school
13.	Leck of facilities
14.	Strict rules
15.	Small schools
16.	Noisy School
17.	Long Assembly
18.	Bad Students
19.	Strict and unfair discipline teachers

20.	Irresponsible teachers
21.	Teachers who are not understanding
22.	Teachers not skillful l
23.	Unfriendly teachers
24.	Teachers who criticises
25.	Teachers who do not attend class
26.	Unfriendly and strict principal
27.	Undiscipline prefects
28.	Lack of facilities in school

Table 9a
Things Respondents Like About Schools

1. Thing they like about school
2. Co-curricular activities
3. Good understanding teachers
4. Big. ean school
5. A place to gain knowledge
6. Teachers who trust student
7. Responsible and firm teachers
8. Teachers who are fair
9. Teachers who are skillful in new teaching methods
10. Good and responsible principal
11. Responsible prefects
12. Beautiful and clean school
13. School with complete facilities
14. Good environment
15. Disciplined students
16. Good and Responsible student
17. Good Co-curricular activities

HOMEWORK ETC.: A CHARACTER DEVELOPMENT EDUCATION PARTNERSHIP PROGRAM

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INTRODUCTION

Traditionally, calls for school reform have focused on academic achievements, better teacher education and other remedial expert-fixing interventions (Lickona 1991, Vincent 1995). It is only in recent years that some parents and teachers recognized character development and character education as major components of school reform. Surging interest in school reform is in a large part a reaction to declining educational standards, escalating violence, and self destructive behaviors involving drugs and alcohol among school children. While it is true that the school is a microcosm of the society, changes in the society are affecting the school in no little measure. The school as we know it is not changing at the same pace at which other agents of education (the church, mosque or synagogue, the home or family, and the community) are changing. Most dual-income parents work outside the home, more children than ever are growing up in poverty, one-parent family is becoming a norm, and more infants and toddlers are under the care of poorly paid day-care staff. Most children are left alone at home with televisions baby-sitting them.

These are the same children who will come to our elementary schools at the age of five or six years. Upon entry to school, new demands are placed on them by adult teachers. They are abruptly required to sit quietly in small groups, interact cooperatively with peers, respect adult rules and follow varieties of adult instructions at school. In most cases, such demands are not typically made by parents in the home environment on such a consistent basis (McGrimmis & Goldstein 1984). These skills demanded by adult teachers are sometimes foreign to these children. Chan &: Rueda (1979) described them as the "hidden curriculum" operating in schools. These hidden curricula (expectations) are based on the assumption that all children enter school with similar experiences and basic character skills from home necessary to help them perform well at school. Based on these assumptions, adult teachers demand children "to behave" rather than teach them how to behave. These same teachers seldom demand children to read or write in place of teaching them skills necessary for reading or writing (Morse 1982, McGinnis & Goldstein 1984' Nwachuku 1996).

When children fail to meet these faulty expectations, frustrated teachers and school administrators find themselves spending valuable instructional time dealing with conflicts, off-task misbehaviors and other discipline problems at school. Perhaps, these factors are motivating teachers and school administrators to seek reactive after-the-fact educational interventions in the name of school reform. These interventions instituted as part of school reform are concentrated on decreasing inappropriate behaviors rather than preventing them through teaching basic Character competencies.

A proactive school reform program must involve all key agents of education (school, home, places of worship and the entire community). Such a program must include systematic teaching of life competencies during the formative years of the child before the onset of problem behaviors (Conyne 1989, Goleman 1995). In his groundbreaking book captioned *Emotional Intelligence*, Goleman (1995) reviewed the benefits of early character education and their implications to learning during the early years of a child's life. Although he used the label *Emotional literacy*, this review points to the fact that character forms the essential foundation for all learning. Brazelton (1992) emphasized that a child's readiness for school depends on the basic knowledge of how to learn. This ability (readiness) is grounded on character. Unlike intelligent quotient and personality which some argue cannot be significantly changed by education or experience (Jensen 1969), basic character competencies can indeed be learned and/or improved upon by children if we care enough to teach them. This means that the elementary and secondary school years of the child provide a critical window of opportunity for teaching basic character skills (Goleman 1995).

Character and Personality

One of the reasons why character development and Character Education was ignored by educators is the intentional swap of the term Character with Personality in most psychology and education literature. One may argue that this benign replacement of terms fooled educators and others in similar helping professions to believe that Character is synonymous with Personality. Furthermore, since Personality sounds more "scientific" it eventually displaced the term Character or projected it as the outer facade of Personality. In reality, the reverse is the case. Personality is the outer part that manifests differently in different social situations.

Brody & Siegel (1992) traced the disappearance of Character and the use of Personality to 1933 Oxford English Dictionary. This early dictionary referred to Character seventy four times from the fourteenth Century through the nineteenth Century and Personality only thirty two times with about two thirds of the use of Personality occurring in the nineteenth Century alone. They argued that Personality is a much younger concept than Character. Generally, Personality is that aspect of a person that transpires in social settings and is open to view. From its' Latin root- Persona (Mask) it is the outer facade that may or may not impress the observer. On the other hand, Character refers to the internal quality of a person which fuels her/his drives' wishes, emotions, thoughts and actions. Unfortunately even the Diagnostic and Statistical Manual of Mental Disorders IV (DSM IV) which schopsychologists, counselors and other pupil-personnel services constantly use, made no reference to Character. Since Character impacts more profound and lasting meaning than does Personality which is more apt to produce ephemeral effects, more attention should be paid to Character development and education. Character Education should make up a bulk of the preventive developmental counseling and teaching curriculum during the early school years of the child.

Character and Education

Early American public school curriculum has a major focus on Character Education, although it was called Moral Education in most curriculum materials dating back to 1848 (Vincent 1995). Linkona (1991) reviewed the history of Character Education in public schools. This review points to some troubling trends dating back to the early 1960's. Despite this terrible decline in Character Education' there are some renewed interests among parents and teachers in various parts of the country on education for Character.

Huffman (1994) presented some model Character Education programs and cited some critical lessons learned from implementing them. These programs are typical samples presented at the National Character Education Conference at St. Louis, Missouri, in July, 1996 where this author presented a position paper on Character Education. Most of these program share some common characteristics which include:

1) Indirect teaching of Character skills through literature biographies, posters, motivational speakers, and conferences.

2) Calls for collaboration between parents and teachers on educating for Character.

3) The need to begin Character Education at the early elementary school years.

4) The fact that all human share some basic core Character traits which all children must learn during the early years of development.

5) The urgent need for schools to participate in Character Education due to changes in today's families and communities.

However, these programs also share some basic shortcomings which include:

1) Lack of direct systematic instruction on Character skills.

2) Little or no involvement of pupil-personnel services staff (Guidance Counselors, Social Workers, or School Psychologists) in Character Education.

3) Lack of concrete partnership models that involves all partners in the development and implementation of the Character Education program.

What follows is a model Character Development Education Partnership Program-Homework Etc. its process and products.

Program Overview

Homework Etc. is a preventive Character Education program developed by partners in a New Haven, CT. local school community. The Southern Connecticut State University counseling program formed a partnership with some business members of the community, parents, and teachers of a local elementary school to help elementary school children build and maintain positive Character skills This program centered around four basic assumptions:

1) That positive Character traits are learnable behaviors.
2) These traits (behaviors) could be identified, analyzed and systematically taught to children in groups just like other academic and recreational skills.
3) That teaching these skills at the early elementary school age will enhance children's personal and academic development and prevent maladaptive behaviors in later adolescence and adult stages of development.
4) That a structured learning group process is useful in teaching children with various skill levels together and training parents to reinforce these skills at home in the form of homework from a school based program.

Method

There are two major components of the program. A parent /community initiative, and direct instructions to children through structured learning groups. In addition to planning and implementing this school-based program, the investigators (partners) saw the need to rekindle the interest and participation of parents, teachers and members of the community in nurturing positive Character traits in children. A no-guilt parents program was organized for parents of participating children to review curriculum materials monthly during the planning and implementation phases of the program. Parents programs helped parents to learn instructional materials and practice ways of reinforcing their children through participatory homework activities which are an integral part of the program curriculum. Based on a needs analysis survey completed by parents and teachers, four specific skills were targeted for the program. These skills are Listening, Respect, Responsibility, and Cooperation. During the implementation phase of the program, community business members were invited as guest speakers to speak to various grade levels on these four basic Character traits. Although there was no formal evaluation of this part of the program, parents interviewed informally after the program year indicated that the program helped them and their children. Specifically, most parents agreed that participating In the collaborative Homework activities with their children was most helpful to them.

Direct Instructions through Structured learning groups

Seven classes of children grades kindergarten through third grade were targeted for direct instructions through structured learning groups. These classes received weekly developmental guidance lessons for one academic year. Developmental guidance lessons

were developed by graduate student Counselors with directions from faculty including the author. The author supervised the development and delivery of these planned lessons to all seven classes. Age-appropriate videotapes (Robbing et al 1992) were selected and used as additional instructional materials for the program.

Six masters degree level counselors-in-training implemented the direct group instruction program weekly for one academic year. All counselors-in-training (facilitators) worked closely with cooperating classroom teachers. Most facilitators used the instructional group sessions as a partial fulfillment (group counseling component of practicum) of their masters degree in counseling. The instructional process involves skill modeling, role playing, performance practice and feedback. Homework activities were assigned to children and their each week to enhance acquisition and transfer of skills. Cooperating classroom teachers monitor and reinforce behavior performance during school hours while parents provide feedback from home during monthly parent sessions.

Evaluation

The effect of direct instruction through structured group sessions on character skills was evaluated. A simple behavior rating scale that required behavior frequency counts was used to complete the pre-intervention (PR) and the post-intervention (PT) ratings. The instrument was developed as a series of four questions on each competency (Character trait) after the McGinnis & Goldstein (1984) teacher skill checklist. Although a total of seven classes (K-3) with 203 students benefited from the direct instructions through structured groups, only four of these classes with ninety eight (98) students

were evaluated before and after the program year. Facilitators randomly selected six children in each observed class and recorded the frequencies of behaviors one week before and one week after interventions. A one-group repeated comparison was done showing the pre-intervention (PR) data, post-intervention (PT) data and Performance change (PC) data.

Results and Discussion

Frequencies of pre-intervention (PR), post-intervention (PT) and performance changes (PC) were calculated on each Character trait taught. Tables 1-9 is a simple illustration of this data.

Listening Skills	**Kindergarten Grades A&B N=42**			
	PR	**PI**	**PC**	**%PC**
Face Speaker	234	205	29	12%
Make Eyecontact	142	86	56	39%
Posture/Seating Behavior	103	64	39	38%
Other Attending Behavior	388	196	192	49%

Figure 1

Listening Skills	**First Grade A N=28**			
	PR	**PI**	**PC**	**%PC**
Face Speaker	184	114	70	38%
Make E	101	72	29	29%
Posture/Seating Behavior	67	41	26	39%
Other Attending Behavior	205	159	46	22%

Figure 2

Listening Skills	**Third Grades A N=28**			
	PR	**PI**	**PC**	**%PC**
Face Speaker	165	98	67	41%
Make Eyecontact	113	84	29	26%
Posture/Seating Behavior	128	110	18	14%
Other Attending Behavior	173	116	57	33%

Figure 3

Key

PR - Represents pre-Intervention
PI - Represents Post-Intervention
PC - Represents Numerical Performance Change
%PC - Represents Percent of Performance Change

Respect	**Kindergarten Grades A&B N=42**			
	PR	**PI**	**PC**	**%PC**
Respect Self	66	43	23	35%
Respect Rules	65	38	27	42%
Respect Others	29	14	15	52%
Wait For Turn	78	52	26	44%

Figure 4

Respect First Grades A N=28	PR	PI	PC	%PC
Respect Self	49	27	22	45%
Respect Rules	66	48	18	27%
Respect Others	47	28	19	40%
Wait For Turn	102	73	29	28%

Figure 5

Respect First Grades A N=28	PR	PI	PC	%PC
Respect Self	64	44	20	31%
Respect Rule	106	69	37	35%
Respect Others	112	87	25	22%
	99	63	36	36%

Figure 6

Responsibility Kindergarten Grades A&B N=42	PR	PI	PC	%PC
Complete Classwork/Assignments		Partially	Completed	
Complete Homework		No Concrete	Data	
Accepts Correction/Feedback				
Makes Choices & Follows Through				

Figure 7

Responsibility First Grades A N=42	PR	PI	PC	%PC
Complete Classwork/Assignments	49	32	17	35%
Complete Homework	24	18	6	25%
Accepts Correction/Feedback	63	48	15	24%
Makes Choices & Follows Through	42	31	11	26%

Figure 8

Responsibility First Grades A N=42	PR	PI	PC	%PC
Complete Classwork/Assignments	53	37	16	30%
Complete Homework	30	19	11	37%
Accepts Correction/Feedback	58	42	16	28%
Makes Choices & Follows Through	70	54	16	23%

Figure 9

The author chose this simple descriptive format primarily for the benefit of partners (parents, teachers and community people) who are not equally sophisticated in statistics. Since this is a pilot sample of an on-going project, additional resources and time will be allocated to future detailed statistical analysis of the data.

Although factors other than direct instruction through structured group sessions on Character skills influenced the performance of subjects, a careful review of data (Figure 1-9) shows some positive performance changes. Data on the Responsibility was not completed in kindergarten classes A & B due to irregular attendance and the loss of a facilitator during the program.

Perhaps, it will be beneficial to look at the general performance changes at this early pilot stage of the study rather then drawing untimely inferences. One general impression from this result is that children can benefit from direct instructions on Character skills in addition to other practical methods of learning in naturalistic settings. These skills can be taught much earlier in elementary schools than taught during later stages of the child's development. It may be beneficial to start with basic listening skills. These listening skills are good prerequisites for other skills such as Respect and Responsibility. Amid these encouraging early results of this pilot study, it is necessary to implement this program for a longer period on a larger scale and observe the impact on both discipline and academic achievement in schools.

References

American Psychiatric Association (1994). Diagnostic and Statistical Manual of Mental Disorder, Fourth Edition (DSM IV). Washington, D.C.: American Psychiatric Press.

Brazelton7 T.B. (1992). The Emotional Foundation of School Readiness (Headstart) National Center for Clinical Infant Program. Arlington, Va.

Brody, S. & Siegel, M.G. (1992). The Evolution of Character. Madison, CT: International University Press.

Chan, K.S. & Ruda, R. (19793. Poverty and Culture in Education: Separate but Equal. Exceptional Children, 45, 422-428.

Conyne, R.K. Primary Preventive Counseling: Empowering People and Systems. Muncie Indians: Accelerated Development Inc.

Goleman, D. (1994). Emotional Intelligence: Why it can Matter more than IQ: New York. Bantam Books.

Huffman, H.A. (1994). Developing a Character Education Program. Alexandria Virginia. ASCD Press.

Jensen, A.R. (1969). How much can we boost IQ and Scholastic Achievement? Harvard Educational Review. 39:1-123.

Lickona, T. (1991). Educating for Character: How our Schools can teach Respect and Responsibility. New York. Bantam Books.

McGinnis? E. & Goldstein, A.P. (1984). Skill-Streaming the Elementary school Child. Champaign, Ill. Research Press.

McGinnis, E. & Goldstein, A.P. (1990). Skill-Streaming in Early Childhood. Champaign, Ill. Research Press.

Morse, W.C. (1982). A Place for Effective Education in Special Education. Teaching Exceptional Children, 15, 209-21 1.

Nwachuku, U.T. (1996). Homework Etc.-Character Development Education. Unpublished paper submitted to the U.S. Dept. of Education.

Robbins, J. et al. (1992). I Can Do It: Taking Responsibility. Pleasantville, NY. Sunburst Communication.

Vanderslice,C.et al. (1995). What's Respect? Pleasantville,NY. Sunburst Communication.

COMPETENCY BASED TEACHER TRAINING PROGRAMME

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1. INTRODUCTION

India became independent in the 1947 & became a republic in 1950 and gave to itself a constitution, with a provision that within 10 years of the enforcement of Indian Constitution, all children in the age group 6 14 would be covered by Universal Elementary Education. Article 45 of the directive principles has defined this hut we have not been able to achieve this goal.

In National Policy on Education 1386, it is resolved to have Universal ccess oof education to all children Universal retention, and quality education for all children To achieve the goals we must serve the teachers n uch *a way* that they in turn, will' serve their pupils better. Hence serving the teacher is preparing the teachers in the best possible manner with positive attitudes and better teaching skills. The process and content of training the teachers is to be strengthened Conscious efforts are necessary to improve the quality of teacher education curriculum are practice.

We know that the status c,, the teacher reflects the socio-cultural ethos of a society. fine must create conditions which may inspire and motivate our teachers an; constructive and creative lines. Hence e we shall have to la greater emphasis on preparing better quality of teachers with high attainments having better skills and positive attitude towards and in their classes commitment willingness to work hard for the children a project for the development of competency Based Teacher Education Curriculum is *taken in Gujarat State* of India from 1996 November.

2. Professional Preparation of Teachers

The professional status of teacher is considered low vis s vis other professionals. teacher education has not yet distinctly established the need for its essentiality as is the case for professions like law, medicine and engineering. People need to be convinced of the inevitability of teacher training for good education.

The basic mandate of education is to prepare the young persons for the future of our nation. The level of fulfilments of above mentioned expectations would be an outcome of the level of training and orientations we provide to them and then on the level of application of their knowledge, understanding they develop and action they take in their classes. The teacher training programme must be developed in the area of effective domain particularly in terms of inculcating and internalising humanistic ethical and moral values amongst the young teachers. Ultimately the teachers must be provided freedom to innovate, to devise appropriate methods of communication and activities relevant to the needs and capabilities of their students.

3. Competency-based Teacher Education

Competency means a desired quality of job performance. the detailed knowledge about the job should be integrated into a pattern of behaviour to serve a useful purpose. The qualities of Competency are enthusiasm, fluency, industry, neatness, originality, adaptability and thrift. Competence is resultant of knowledge functionally operative at the appropriate time.

When there is need to increase the accountability of the teacher education system, naturally, the treatment to teacher education demands the explicit statement of performance in terms of knowledge, values, skills and attitudes which we expect from the teachers through their preservice education. Such explicit performance statements indicating change in behaviour in terms of knowledge, values, skills, attitudes are technically known as competencies. The assumption in this kind of presentation of curriculum is, competency statement would make it clear to teachers what is expected! of them and the evaluation process too would be more pointed. Evaluation of the teacher's performance can be done through these competency statements which be observable' achievable and communicable.

4. The Nature of Competency-based Curriculum

It is observed that, due to disciplinarian approach, the integrated action agenda essential for developing skills does not clearly emerge. Instead, the skills, the attitudes and knowledge that we want to acquire for performing the role of teacher would be listed down explicited in different classified sections, and only the relevant information or theory will be used for clarifying the specific competency and practice there off. So the essential concepts from philosophy, sociology, history of education, psychology, evaluation are put together and, the additional information load from these disciplines is reduced. The approach adopted is first to decide what kind of a teacher we want and what competencies would an individual learner has to acquire for fulfilling the role. As such, the teacher's union roles as facilitator of learning in the classroom, in the community, are visualized. Also, the learner centered approach is accepted as a central core concern in the entire organization of curriculum. Therefore, the student teacher too, is expected to get same freedom of action in learning. As such, the transactional strategies are organized where the 'earner is focus. The quality is to be universalized. So every teacher must reach a certain level of mastery.

5. Competencies and Qualities

The minimum levels of learning were laid down in 1991 by the R.H.Dave committee report for the primary stage of school education and these are stated in terms of competencies. The set of MLLs represents a rationale criteria for judging the adequacy of curriculum inputs provided and the learning out-comes expected . The implications of this exercise included lightening of curriculum load, providing flexibility by the teacher to relate text book information and objective reality into a meaningful process of understanding and application. It was also ensured that the competencies are acquired at the level which is sustainable. It essentially aims at permitting mastery level learning not only by few children but by all children.

NCTE organised various national level discussions and prof R.H.Dave Opened new new of CBTE.

For such an approach to be implemented the competency areas are worked out as under :

a) Contextual Competencies
b) Conceptual Competencies
c) Content Competencies
d) Transactional competencies
e) v. Competencies related to other educational activities
f) Competencies to develop teaching learning material
g) Evaluation Competencies
h) Management Competencies
i) Competencies related to working with parents
j) Competancies related to working with community & other agencies

More acquisition of Competencies is no guarantee of preparing a committed professional teacher. Teacher's job is such which requires sufficient measures of human qualifies not only to be internalised but also to be put to actual practice in performance of the assigned task within the classroom, outside the classroom and in interactions with the community. In a society bogged down by disparities and diversities of various categories and magnitude, the teachers job is to generate a climate of social cohesion and a will to live together. He can attain all this only through a realistic self-image, sense of being a partner in nation building with adequate modesty. Some of the professional qualities could be the following:

- Love & affection for children.
- Tolerance for mistakes & mischiefs of young children.
- Professional ethic - Accountability, Punctuality, Regularity, Integrity.
- Perseverance
- Relationship with parents and community.
- Spirit of working together,democratic norms.
- Sense of social justice and equity-constitutional values.
- Self image of being a builder of nation.
- Modesty
- Concern for others.

It is the cohesive contribution of the Competencies and the qualities that would ensure commitment and dedication. Prof.R.H.Dave defined preservice Teacher Education "It is a process of transformation of a lay-person into a competent and committed profession education."

The curriculum of teacher education is to devised accordingly.

6. The Teacher Co

In several discussions and work-shops organised by National Council for Teacher Education various alternatives on the possible teacher competencies at elementary stage were considered. The consensus Finally emerged identifying ten major areas. This cluster of ten areas appears to be comprehensive so far as the perception of professionally trained teacher at this stage is concerned. The weightage and emphasis on some of the Competencies may vary depending upon the specific context under which the teaching reaming is taking place. however, the evident significance of each category hardly needs much elaboration once the cluster is presented before the teacher. The area wise Competencies are to be developed through work-shops and experiments.

6.1 Contextual Competencies:

With the expansion of education at elementary stage there have been situations in which teachers from an entirely different social cultural background have gone to teacher in entirely alien conditions and situations. A teacher from a middle class unban background finds himself totally at sea in a remote tribal area. Teachers in fact have to be fully familiar with the total environment of their place of work. The community norms, their cultural sensitivities and their approach to education if understood properly could really help the teacher in discharging his duties. The education level of the community and their socio-economic development must be understood by the teacher and appreciated in term of the conditions under which these might have taken ace One of the first obligations of the teacher would be to ensure his own accept-ability by the community.

In the context of competency CBTE this aspect assumes greater significance as every child is to be looked after educationally pedagogically and emotionally by the teacher. The teacher would also make extra efforts to provide reinforcement and enrichment to the child in bringing him up to the mastery level. This would be possible only when the context is fully understood and is utilised with sensitivity.

6.2 Conceptual competencies:

The process of transforming an individual into a profession-ally competent teacher would require the individual to develop, broaden and reorganise his knowledge, skills and attitudes. they need to be familiarised with basic principle of education,pedagogy,child development,,psychological aspects and other related areas. Why they need to go into all these aspects must be appreciated by the trainees. That to handle children, one needs to have the right conceptual competencies in various areas is not indeed easy to perceive.

6.3 Content Competencies:

A Teacher shall be considered to have mastered the content competencies. If he understands the structures of the subjects, is capable of analyzing the curriculum into relevant facts, concepts and principles. In the present context, he should be able to analyse existing textbooks from the point of view of the competencies as sequenced in MLLs statements. From those, it should be possible for him to identify the gap areas. He has to comprehend the importance of assisting every individual child in organised his cognitive structures.

A teacher with mastery in content competencies would be able to identify areas and units where self-learning can be encourged.Likewise, it would also be possible to identify areas of group learning. Such strategies would help the learners in so many ways .

Use of contextual experiences and resources from the community can be effectively made only by teachers who are well- in the content competencies

6.4 Transactional competencies:

Most of the teacher education programmes focus on the various methods and strategies that a trained teacher must learn for future use. Unfortunately many of these methods and strategies are known to be unusable after the teacher leaves the training institution and joins the schools. While teaching per say is the most prominent task of the teacher as understood for centuries, the process can be classified into several phases. The existing scenario where even after having learnt the methods of teaching the school teachers revert to the age-old method of passing on the information completing the lesson and conducting the examination. This has to be changed and changed drastically.

6.5 Competencies related to other educational activities:

This is a very significant area which could transform the cultural context within the school. Those who have acquired the necessary competencies could enliven these activities through their initiative and participation. Needless to exphasise how much is learnt for the future life through such activities within the schools. Children get a chance to give expression.to their creative abilities and derive tremendous motivation from the appreciation which may follow from the pears, teachers and community members. Apart from activities which are organised within the school,certain others outside the school and the community, like visits to places of historical importance,factories and production centres are highly stimulating and educationally sound inputs. It has been observed that all those institutions which are full of activities and dynamism derived a lot from such motivated teachers.

6.6 Competencies to develop teaching learning material:

Three types of learning interactions: Learner-teacher and learner-learner, learner material teak place in schools. Each one of these gives rise to the corresponding learning process; guided learning mutual learning and self-learninig Without a strong self learning , component masterly cannot be achieved by the learners Textbooks and textual material are the most important instrument for initiating learning. It should be possible now to provide materials for all the three types of learning. In addition, it would be necessary to provide workbooks, teachers' notebooks, classical teaching aids like maps, charts, diagrams and inputs available in terms of educational technology and local resources. When these are being developed and used on the competency based strategy, certain aspects shall have to be kept in view.

In fact, during the first 2 - 3 years, schools should have no textbooks but only exercise books. Work books should also help in the management of multigrade class room situations which our teachers shall be facing for quite some time in future Materials have to be prepared with sensitivity and full focus on the competencies expected to be developed in the school. Every small aspect would serious implications as such need not be ignored.

Mastery level learning would be possible if the teachers realise that a lot of pre-learning is possible at home and elsewhere. The reinforcement through exercises and workbooks would be an essential part of the learning. In spite of these after a lapse of time, re-learning would be essential. The teacher will have to ensure that the pre-learning is utilised and re-learning is ensured.

6.7 Evaluation Competencies:

The present position clearly indicates that evaluation has continued to be an area of neglect in educational planning and that of fear and torture for the children. They test only the rote memory of the children. Due to the inadequacies of the system, the children suffer. One of the factors which has greatly reduced the quality of school education in India, is the prescription that children should pass the examination at 33%. This indicates total lack of concern for quality and equity which is a must in any society at the elementary stage. The MLL strategy has provided a practical answer to this anomaly. Obviously it would require additional hardwork with commitment by the teachers as they shall have to identify the inputs In fact, a large number of children have to be empowered for availing the equality of opportunity in access and equality achievement.

A laudable objective is as such expressed with a sense of humility when we use the term 'practical!' all. The term 'potential' is used as when Minimum Levels of Learning are initially only 'specified', these are supposed to be acquired by the children. These would be actual competencies once acquisition by thlearners at the mastery level. In the transmission from 'potential' ti 'actual', critical role is expected to be played by promoters of quality. This would include institutions teachers, schools, peer groups, community and others.

6.8 Management Competencies:

Educational management in India is based upon hierarchical system of administration. It has not chaged over the years. Not many teachers are familiar with their role and responsibilities in educational management. Managing a administrator teacher interaction towards gainful outcomes is something which has to be learnt by every teacher. The teachers should also remain familiar with the educational policies and changes in the policies.

The inspectoral system in school education is a very clear example which indicates the gaps in educational management in the country. They hardly have any chance of providing professional support and expertise to the teachers, principals and managers of the schools. It is more relevant when competencies are being acquired at masterly level.

6.9 Competencies related to working with parents:

As indicated earlier, the critical issue in elementary education is the universalization of the elementary education. The soft roup of children are already in the schools, the difficult groups are either drop outs or un enrolled. However parents who due to certain reasons are not able to keep their children in the schools or enroll them in the schools do so under certain compulsions only. During the teacher training at pre-service as well as at inservice this aspect need to be dealt with sociologically, psychologically and also in practical terms

6.10 competencies related to work with community other agencies :

Larger rural habilitation now do not have the monopoly of a single school established by local authorities. Those who can afford, are moving towards privately managed schools. Teachers to improve the situation in these schools have to seek the cooperation of members of the community particularly the members of the Panchayats and other opinion leaders respected by the village community. There will be other developmental agencies providing employment, encouraging self-employment and training in certain vocations. Such agencies could be invited to interact with the school situations, thereby enriching the process of learner attainments. One of the major developments of the last two decades has been the total alienation of the community from the school. As a consequence of the same, number of dilapidated school buildings, broken furniture, non-availability of eqiupment can be observed in a very large number of schools. Teachers now have a challenging task. How to become acceptable to the community and ensure com m unity support for the school If achieved this would be a great success on their part.

7. Professional Qualities

What makes a great Teacher ? One who 'knows' the subject matter and can cover the Chapters prescribed in the syllabus could be a good teacher. A teacher must work with implicit faith in the power of humanity. Rabindranath Tagore always pleaded for a teacher-learner partnership in this quest; 'instead of teacher exercising authority over the pupils, both should be guided by the same objective viz pursuits of culture and the search for truth'.

It is obvious that the teachers job is much more than mere teaching. The teacher education programmes, as such, must be explicit about the importance, significance of the internalisation of the qualities amongst all the teachers. A loving teacher would bring smile on the young faces. It may be reducing the drop out rates. His affection may create a joyful learning situation. His perseverance may lead to individual problems to be well understood and solved. A life may be served and shown the right direction T he capacity of tolerance may help in solving many of crises saving time, energy and resources.

There is a serious crisis of values and ethics in public life; the role of teachers has, once again, become critical. If the teacher is a falter, who would guide young persons to discover the 'invisible sun' within them ? A sense of modesty and humility has been the hall mark of teachers everywhere. At this juncture, they also need a self-image, and confidence. Basic objective of education is not only a good quality of life characterised by materialistic gains but the one which aims at achieving higher levels of spiritual, creative and scholarly attainments. They are the builders of the nation. They must know it and the nation must understand it. The nation needs teachers who also, apart from competence also possess certain basic human qualities which can enlighten the future lucks Of young children of today.

[Note: The paper is prepared with the help of:

(1) Deliberations of Dr. R.H.Dave (Former Director Inst.of Edu-UNESCO.

(2) Work-shops preparing Competency Based Curriculum for Teacher Education organised by NCTE - INDIA.]

SCHOOL-FOCUSED IN-SERVICE TRAINING: A KEY TO RESTRUCTURING ISRAELI SCHOOLS?

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A Conceptual Framework

School-Based In-Service Training Programs

The model of school-based in-service training (SBIT) developed following criticism of traditional in-service training courses and as a result of the movement towards focusing change in schools on a school-based curriculum. Consensus is almost complete as to the claim, that teachers' in service training courses are generally not effective (Eraut, 1987; Evans, 1984; Fullan, 1991; McLaughlin & Marsh, 1990; Stone, 1987).

According to those who favor a school-based in-service training program, the school is the significant unit for change, with the teachers being the appropriate agents of change. The assumption is that if the training course takes place in the school, it will be relevant to the needs of the teachers and barriers to its implementation will disappear.

Some studies concerned with SBIT (e.g., Bradley, 1991; Williamson, 1989; Wray, 1984). distinguish between school-based in-service training (SBIT) and school-focused in-service training (SFIT). Here "school-based" is equated with "located in the school" and mainly refers to courses on academic subjects and contents as defined by the teachers as well as external experts.

On the other hand, "school-focused" refers to a training course which addresses problems existing within the school, and aims to meet the needs of all of the stakeholders, teachers, students and other partners in the educational process. SFIT transfers the responsibility for the school's development to the school itself {Isabel, 1994). The school becomes an organization whose members are constantly expanding their ability to generate the results for which they are striving, and in which the learning process becomes a cooperative venture (Holly, 1994b), This is where new models of thinking are developed, where collective aspirations are discussed, where people are constantly learning how to learn together (Seng, 1990). The literature refer' to the following categories to characterize SFIT: effectiveness, administration and management. time, location, evaluation and compensation. Due to space limitations, we will discuss here only the first two.

Needs: Identifying school needs is not an easy task (Holly 1994a; Isobel, 1994; Jayne, 1984; Neel & Monroe, 1988). SFIT is based on a problem-solving model which assumes that education is a complex process going on in an ever-changing reality, and also that problems will constantly arise in schools and classes, although it isn't easy for teachers to define them (Wray, 1984). According to this concept, the more people are aware of a problem and can clearly define it, the more likely it is that the solution found through the course will be effective. The in-service training course must therefore focus on these problems and on finding their solutions (Eraut, 1 987).

Chatwin, Turner, and Wick (1988), who examined in-service training programs in elementary schools in the UK, found that when schools based their courses only on needs determined by individual teachers, there was a lack of suitability to the school's needs, They claim that a school's needs are not the sum total of its teachers' needs, and that it Is not always easy to assess the combined needs of various interest groups, such as local authorities, community, principal, teachers and counselors.

To assess needs the Baker Project[1] in the UK asked teachers: "What kind of in-service training program do you need?" According to Wray (1989) this sort of unsophisticated needs assessment can only result in unsophisticated answers. In addition, it seems that when teachers lack knowledge in a particular area, they often can neither define their needs nor identify their own weaknesses in relation to the subject. Most teachers formulated their answers very generally, such as "Could we have a course on teaching reading, or on literacy?" When requests are formulated in such general terms, chances are slim that the in-service workshop will actually meet the needs. If needs for in-service training cannot be defined precisely, then schools have little chance of locating appropriate instructors.

According to Jayne (1984), in order to effectively define needs, one must utilize the resources of expert knowledge throughout the needs assessment process. Expert help is required mainly to keep the teachers on track when considering a particular subject, to help identify their goals regarding the subject, and finally, to formulate and define clear and distinct in-service training needs.

Effectiveness: The effectiveness of the training course depends on the extent to which it is implemented in the classroom (Griffiths, 1984). Researchers have found that SFIT is more effective than traditional in-service training (e.g., Bradley, 1991). This is because the SFIT is planned for teachers and directed by them, and because the topics taught and the pace of change introduction are controlled jointly by the principal and the staff. Logan (1988) found a high level of effectiveness in 14 SFITs he studied in Australia. The courses revealed to the teachers the worth of their colleagues as a source of professional counseling; teachers applied processes of cooperative learning through problem-solving, and stated that they preferred curricula directed and administered by the teaching staff. In addition, the training courses strengthened the teachers' awareness of the need for professional development.

Instituting Change In Schools

Teacher in-service training programs conducted in the schools are of great importance in instituting change, but in order to be successful, it is important to be aware of the difficulties involved and the many factors that affect the success of such programs (Cuban, 1992; Fullan, 1991; Glover & Brighouse, 1994; Little, 1986; Saraso, 1982).

Factors that affect change in education can be viewed from four aspects: the character of the change, the process of change, factors relating to individuals involved in the change, and external agents. The more positive the attitude toward the change, and the more it is supported by the various agents, the better its chances for success. Conversely, if some of the individuals involved oppose the change, the change will be less significant (Fullan, 1991)

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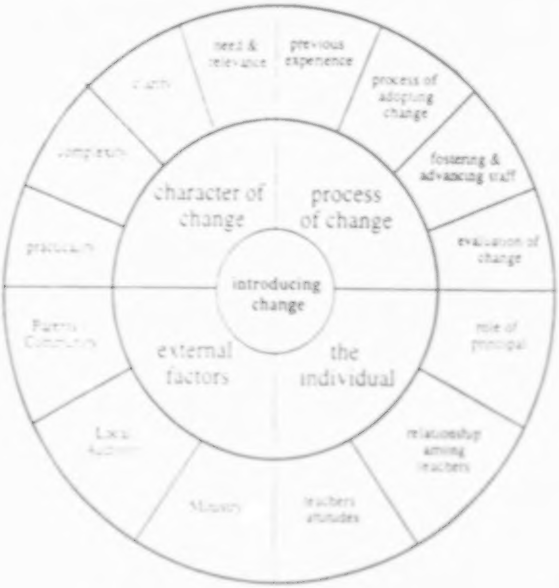
[1] A government program in which-as part of teachers' employment and wage conditions-five days annually (called "Baker's days") were allotted to participation in school in-service training programs.

Figure 1: Components of Introducing Change


introducing change
character of change
process of change
external factors
the individual
need & relevance
previous experience
process of adopting change
fostering & advancing staff
evaluation of change
role of principal
relationship among teachers
teachers attitudes
Ministry
Local Authority
Parents / Community
practicality
complexity
clarity

Character of change: Glickman (1993) holds that creating change in schools is not a linear process in which one problem after another is solved, but rather a complex process in which many problems are dealt with concurrently. The institution of the change may, in itself, give rise to new problems, which also have to be dealt with in order to achieve the change. The perceived need for change, the clarity in defining the goals of the proposed change, its complexity and sophistication together with its practicality, all combine to increase the level of interest in the program and the motivation of the teachers to implement it (Fullan,1991).

Factors related to process: Every change initiated in the school affects all the subsystems involved, e.g., teaching methods, role of administrative and teaching staff, and external agents such as the inspectorate, the parents and the community. Therefore, as many of these as possible should be willing to accept the change and be involved in implementing it(Hargreaves & Hopkins, 1993; Leithwood, Jantzi & Fernandez, 1994; Glickman, 1993; Schwarts, 1986). Previous experience in the institution of change in the school, whether positive or negative, affects the way the current change will be accepted, and thus must be taken into account when planning new initiatives (Eraut, 1987; Fullan, 1991). In order for change to be effective and lasting, it must become an integral part of school functioning . The large number of changes which are attempted in the schools causes many to die out (Ball, 1987).

Individuals involved in the change: Individual perceptions of the change, and the extent to which the change suits the individual styles of the staff are significant in its successful implementation. The school principal has a vital role in the management of change and can function either as a facilitator or as the principle barrier to change (Hoy and Miskel, 1991; Sarason, 1982). The character of the teachers, their personalities, attitudes, knowledge, professional and personal relationships, their commitment to their jobs, to the school and to the change process are all factors which cannot be ignored (Sarason, 1986; Chatwin et al., 1988). The interaction among the teachers, the extent to

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which they support and help one another is another critical factor in the success of a new program (Little, 1986).

External factors: According to Eraut 1987), changes initiated by external authorities are doomed to failure because there is rarely enough preparation within the school for their acceptance. Forcing changes on the schools often has the opposite effect: that of delaying change (Goodlad, 1987; McLaughlin & Marsh, 1990;). However, an inspector who helps in formulating communal goals and an atmosphere partial to change can positively affect the motivation of the school to define goofs and institute change (Leithwood et al,, 1994). All these factors must be taken into account when considering the institution of educational change.

School Reform and Restructuring

In recent years, the trend in school change is toward school restructuring. Restructuring stems, as do other changes and reforms in education, from the desire to improve the quality of education, and is a result of dissatisfaction with managerial changes deriving from the business world - *wave one reforms*- and implemented, as such, in the field of education. There is no agreement on precisely what restructuring means. Goldman, Dunlop, and Conley (1991) suggest that the definition of restructuring should be created daily as educators translate it into programs and actions. The core of restructuring is the focus on systematic change (Fullan, 1993; Murphy, 1993). Restructuring combines a managerial approach which emphasizes organizational structure and activities, with modern educational theory concerning teaching, learning and curriculum, and urges significant changes in the role definition of educational functionaries.

The restructuring of schools is a complex process. It requires a deep change in education neither superficial alteration in the forms and structure of schools, nor merely doing the same things better, but a fundamental reconsideration of human interactions at every level of the educational enterprise (Murphy & Hallinger, 1993; Murphy, 1992; Louis & Murphy, 1994). It is characterized by teacher empowerment and professionalism, a school culture which encourages cooperation, and which defines new roles for teachers by which they become leaders who both develop policy and implement it. The focus must be the school; the mode, dialogue among all stakeholders - parents, students, teachers and authorities - with the aim of defining goals and needs shared by the school, the community and the students (Fullan, 1991).

Restructuring efforts must be contextualized. They must be tailored to the needs of a specific school. What works at one school may not work at another - or at the same school at a different time or with cast of players with different values and interests (Webb, Corbett & Wilson, 1993). The only way to ensure that the school serves its own needs and those of the community within which it functions, is to pass responsibility to the teachers, and this demands radical reorganization of in-service teacher training.

The questions examined in the present study are:

1. What forces are beneficial or detrimental to the implementation of the SFIT$
2. What is the role of the SFIT in the progress of the school and in the introduction of change in it?

Methodology

Research Method

Since achieving the above purposes calls for a prolonged presence in the schools under investigation and for an in-depth examination of all their aspects, the "case study" method was chosen, utilizing a qualitative approach. The case study facilitates intimate, direct contact with the research objects and the processes (Merriam, 1991) and it enables researchers to examine a variety of processes while they occur. In addition, the case study has the capacity to provide a complete and complex picture of reality from which school officials can select aspects which are relevant to their perceived needs and to adopt them

The Research Design and Instruments

The study included ten topic-oriented in-depth case studies, conducted in ten elementary schools during the 1994/95 and 1995/96 school years. The case studies included non-participant observations, in-depth interviews conducted in the schools, and documentation of all SFIT-related activities in the schools. The schools were given the choice to remain anonymous.

Analysis of the Findings

Qualitative analysis was performed of the observations, interviews, and documents related to the SFIT. Analysis was conducted through categories derived from the data itself (Emic) as well as through categories taken from the literature (Etic)); themes and patterns in the data were identified, clarified, and verified, using the constant comparative method of content analysis (Glaser & Strauss, 1967). Integration of categories and their various characteristics yielded the basis for theoretical arguments. This basis stemmed directly from material produced and aids in interpretation.

Findings and Discussion

a) *What Forces are Beneficial or Detrimental to the Implementation of the In-service Training Course in the Schools?*
The school's organizational structure and its evolving organizational culture (Murphy, 1994) affect the administration of the SFIT and the extent of its success. We shall now discuss four central factors observed in the schools under study which were found to be eithebeneficial or detrimental to the success of the training courses.

A Tradition of In Service Training

Teachers' attitudes to the SFIT were influenced to a considerable extent by their school's history of in-service training. Schools with a long-established tradition of staff meetings, whether they were called Learning-Teachers' Rooms, Pedagogic Councils, Evening Meetings, or otherwise, were used to implement the goals of the educational institution through a professional community of teacher-learners working cooperatively. In these schools the staff's experience and willingness to participate in in-service training, and their expectations from the courses, all created a positive and supportive initial attitude towards the training course. One teacher explained: "A school can't function without its committees and training courses. These are the glue that binds us. Without them, when would we get to see the entire staff, discuss important issues, and make decision ?" On the other hand, teachers in schools which embarked upon in-service training only because of the Ministerial ruling, were skeptical throughout as to its necessity for both the school and its teachers. This phenomenon has two aspects: the first is related to the experience imposed on the schools by the original wage agreement which called for compulsory in-service training but provided neither explanations nor pedagogical goals or justification. (A revision of the agreement, six months later, made the in-service optional.) This resulted in internal opposition to the program. The second aspect stems from the school's past experience: teachers accustomed to individual planning found school-wide formulation of the course irrelevant for their own teaching.

Organizational Structure (the functioning of the teachers' forum In SFIT)

The "organizational structure" of the school refers to the structures of cooperative work and planning existing within the school, and their directions of communication. This includes the extent of dispersion, as opposed to the centralization, of authority and responsibility and the extent of the staff's cooperation in decision-making processes.

We found that in schools with a centralist-authoritative structure, the SFIT served as a forum for transmitting information to teachers and as a source of passive learning. In these schools the teachers were not considered partners in decision-making or in determining policy. As a result, their involvement in the course was low. On the other hand, in schools with a disperse --professional organizational structure, manifesting Silberstein's (1991) three levels of planning (global, grade-level and individual class), the SFIT provided a flexible organizational framework in which problems were raised, discussions held, decisions made, school policy devised and both process and product systematically evaluated.

It can be concluded that an organizational structure in which there is dispersion of authority and delegation of responsibility, which gives autonomy to people in specific roles and encourages open communication and teamwork at all levels of planning, is beneficial to the success of the in-service training as opposed to a hierarchical-bureaucratic structure which is detrimental to the success of SFIT.

Planning and Conducting the In-Service Training Program

The planning of an in-service training program, the topics selected and the professional quality of the instruction, all strongly affect teachers' satisfaction with the program and its effectiveness. Teachers' satisfaction with the SFIT was closely linked to the willingness of the management to include the teachers in determining its contents and character.

In those schools that traditionally involved teachers in defining objectives, and where the SFIT was perceived as a way to fulfill these objectives, teachers perceived the SFIT as relevant to their classes and to the school. Their involvement at all stages was considerable and they felt responsible for successfully carrying out the tasks defined. The SFIT program in these schools was generally organized around a few main issues throughout the school year. For example, at the "Kfir" school, a unique model for needs assessment was developed. The major part of the process took place in the forum of a staff meeting in the framework of SFIT. The following quotations are taken from the protocol of the school meeting for defining annual goals and planning major in-service training topics:

Bensi {Principal): As *to aims (b) and (c), continuous updating of SBCD (school -based curriculum development) and its classroom implementation is needed, who would like to react?*

Orit: If *we want SBCD, we have to put it on the school agenda We e can 't say we want SBCD and do nothing about it. During the non-teaching hours we spend at school each week, we only have time to deal with the most urgent and critical problems which arise. We never have time to deal with SBCD.*

lea: There are essential conditions for SBCD, 'When we were involved in curriculum development, we spent hours in discussions with experts and for new teachers, it was like a textbook. But curriculum isn't like a cookbook. You can 't pick a recipe and begin to teach, if you don't understand the whole process, the background, the possibilities and the different directions, you are doomed to failure. You can 't go into a classroom and teach if you have only read one chapter.

Bensi: */ hope. that next year we will all get back to SBCD so that t all the work we did during 3 years won 't be wasted. During the in-service program this year, we never got around to SBCD. Last year, we devoted ten meetings to it. ...*

We can see that the discussion of school aims and priorities is closely connected to planning the in-service program. The in-service training program is expected to reflect school aims as formulated by the school staff. Several sources contribute to the process of formulating school goals: To determine its needs, the school used its educational platform {formulated by the teaching staff) as a sort of "compass"; they formulated the school's operational goals annually, and perceived the SFIT as an instrument which can respond to ongoing problems in the school, On the other hand, schools that based their SFIT program on availability of lecturers or on teachers' responses to general questions such as: "Are you interested in a training course?" or 'What course do you need).' usually produced SFIT plans that had little to do with the schools' real needs, In these schools, topics discussed in the course were often completely irrelevant to the school; training courses sometimes included such subjects as "Flower Arrangement" or "Improving Couple Relations", and even when subjects under discussion were more clearly related to professional areas in teaching, they were often not perceived as relevant to the teacher's daily work in class. In schools with a hierarchic-centralistic structure of authority, we found that the SFIT program was determined by the principal and deputies without consulting the teachers. A typical teacher's response was: "If they had asked us...we might have chosen the same subjects, but the fact that the whole program was 'dumped' on us made us lose interest in participating."

In interviews, teachers distinguished between outside-of-school training programs, which they usually chose according to their personal interest in a particular subject, and the SFIT whose subjects they expected would primarily be relevant to their work in class and to the school as a whole, but also interesting and well-taught. In fact, schools which relied mainly on external sources for in-service training often chose lecturers and companies offering training courses with no prior information as to their professional level. As a result, according to the teachers, many lectures were uninteresting both in substance and delivery.

Character of Management

The administrative style of the principal considerably effects the character and implementation of the SFIT. In schools whose principal focused on managing both the SBIT and the staff, the latterwere typically passive, feeling that any discussion or deliberation was conducted symbolically while eventually all decisions would always be made in the principal's office. In response to a question about her expectations from the SBIT, a teacher at a traditional school said, "I don't expect very much because I believe that when all is said and done, things won't be directed by us...but rather by the 'boss. I'm not saying that's not right, I also run my house by my rules...." Another teacher expressed her doubts, saying, "What harms the SBIT is that they just dump things on us. On one hand they'll say, let's make this decision together, and on the other hand they don't take our opinion into consideration."

The principal's administrative style as revealed in the SBIT reflects the character of his/her activity in the daily life of the school. Observation of the in-service training program reveals, beyond behavioral patterns and relationships in the course, patterns of activity and relationships in the school in general. Does the principal enable his/her teachers to conduct open discussions, is s/he willing to hear opposing opinions and to cope with confrontation? Or does s/she use the SBIT as just another forum in which to present his/her decisions and viewpoints? In those schools where the SBIT did not serve as a forum for the staff to express its views, and where relevant issues and emotions were not discussed, both the learning and discussion were irrelevant.

At the other end of the spectrum we found principals who saw the SFIT as a springboard for formulating the school's educational philosophy, i.e., fostering a whole-school approach to its educational activity, and creating a consensus among staff members as to the school's goals and the means of achieving them. In those schools where, in managing the SFIT, the principal acts as the leader of a complicated network of relationships("leading from the center") rather than as an employer, relations are based not on authority, but on mutual respect and equality of contribution and commitment (Leithwood et al., 1994; Louis & Murphy, 1994; Murphy, 1994). In those of the schools studied that were managed in this way, staff members themselves prepared and transmitted a large part of the courses, addressing school needs. These courses had a dynamic character and included workshops, discussions, planning and activity groups, rather than predominantly frontal lectures. The teaching staff in these schools functions as a "community of professional learners" (Sergiovani, 1994) and the SFIT serves as a site for peer teaching, for raising problems, for open discussion and for decision-making. In traditional schools, where often the principal doesn't believe in the abilities of the staff, the majority of lectures are given by external lecturers who are strangers to the school culture and unfamiliar with its intricacies.

Physical Conditions

The Director-General's circular which determined that the nationwide SFIT would begin on January 1st, 1994 (Ministry of Education, 1994) was not accompanied by the preparation of any suitable infrastructure in the schools. School planning generally does not take into consideration the spaces in which teachers can work and train. Teachers' Common rooms in most schools are too small for the entire staff, and, in many cases, have neither sufficient heating nor air-conditioning. Teachers participating in SFIT had to crowd into a small room, full of files and teaching aids. Many teachers said that the poor physical conditions lessened their motivation and even caused bitterness. "No self-respecting workplace would have its employees take a training course in conditions like these. In-service training courses - even for truck drivers - are held in hotels, in air-conditioned boardrooms, with refreshments...," It should be mentioned here, that in most cases, these poor physical conditions do not depend on a particular school. but reflect the constraints of the entire school system. Judging by conditions in most schools, the system does not regard the teacher as a professional whose training continues throughout professional life. There are no classrooms or lecture halls for teachers, there is not suitable library, and in communities with no local library, there is no computer communication system to enable a teacher to communicate with external libraries and databases.

In summing up this question, it is evident that the various factors mentioned as either detrimental or beneficial to the success of the SFIT affect the direction and administration of the in-service training in a way that distinguishes between autonomous schools and those characterized as "traditional", It should be pointed out that these factors are not dichotomous, but that each factor represents a scale whose two parameters are specified below (see Table 1).

Table 1: SFIT in "Traditional" and in Autonomous Schools

Subject	"Traditional" Schools	Autonomous Schools
Attitude towards SFIT	Seen as coercion, or as a passing fad	Seen as internal need of school
SFIT	List of changing subjects, chosen by availability of personnel	Focused in identified needs of school and on a small number of subjects for long-term study
Teacher involvement	Participation in SFIT only	Involvement in planning and course of SFIT
Usual methods of Instruction	Lectures	Lectures, workshops, discussions
Instructors	External lectures	External lecturers and school functionaries
Functioning of Teachers' Forum in SFIT	Framework of reporting and learning	The school as a "community of learners" for discussion, raising problems, and decision-making
Functioning of the principal in SFIT	Lateral administration, directing change	Aiding, facilitating, delegation of responsibilities
Organization culture	Bureaucratic	Professional cooperation
Evaluation of SFIT	Intuitive, focus on satisfaction	Systematic evaluation of process and products

* The list of subjects is partial and represents central factors found to contribute to the clarification of the idea of SFIT.

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From the above, it appears that the SFIT may serve as a mirror of the school's daily life. Through the SFIT it is possible to learn about the school's culture, patterns of administration, organizational structure, attitudes toward professional development, and more.

b) The Role of the Focused In-Service Training in School Processes

In dealing with this issue, we will only refer to those schools under study which we identified as change-seeking and autonomous schools. We found that the focused in-service training program served many functions, the major ones of which are as follows:

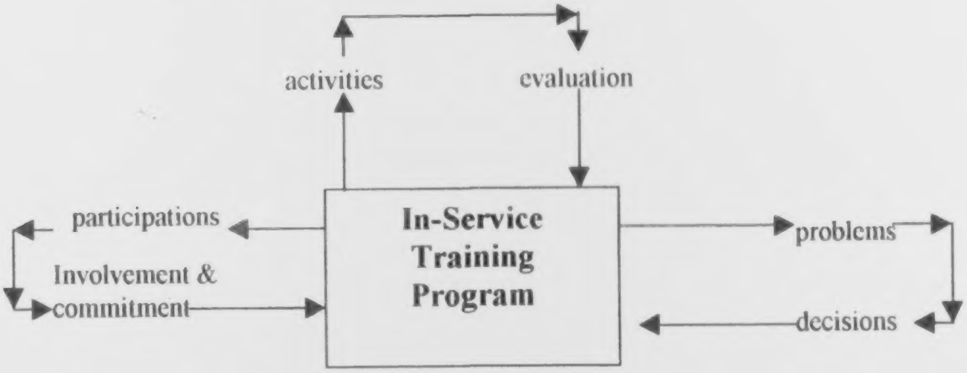
1. a channel for communication and a crossroads for decision making,
2. a means for systematizing and instituting change,
3. a framework for professional development, and
4. a resource for school curriculum planning.

Due to space limitations, we will focus only on the first function, while the others will only be briefly mentioned,

1) SFIT as a Crossroads for Decision-Making

Figure 2 shows us how the SFIT serves as a central junction for coordination and decision-making; school issues flow into and out of it. The junction has three branches: problems-decisions,participation-involvement and commitment, and activities-evaluation.

Figure 2: **SFIT as a Channel of Communication and a Crossroads for Decision-making**



Problems - Decisions: This branch rectifies some of the deficiencies in school relationships and interactions. School culture is characterized as 'loosely coupled' (Sharan, 1995), i.e., school processes are not necessarily connected to one another or to all faculty members. As a result, concurrent processes may not be complementary, and they may even be contradictory (Milstein, 1993). We noticed that within the forum provided by the SFIT, teachers and other functionaries have the opportunity to share problems they encounter and discuss these on the basis of their personal experience in similar situations. Because these problems are discussed in the wide forum of the SFIT, the outlook is school-wide and solutions can take into account both the physical and the human aspects of the problem and how these are interrelated. Institutionalizing the decisions is not an isolated, technical change, but rather the result of considerations and deliberations evolving from good teaching/learning processes. In the schools we studied, the SFIT allowed the staff to seek external experts who served as consultants while they integrated the outcomes of internal staff-wide discussions, cooperative decision-making, and sharing of ideas among staff members. These changes in the decision-making process are the glue that holds the whole restructuring effort together (Perstein, 1993).

Participation - Involvement and Commitment: As mentioned above, we have found that institutionalized staff meetings to discuss school problems and identify possible solutions encouraged staff involvement in curriculum development and contributed to the improvement of communication among staff members, as well as bringing about a more integrated organizational structure.

Involving teachers in the pacing and direction of the process of change contributes to an individual and collective sense of involvement in the change (Sarason, 1982; Isobel, 1994) An example of a school which made major progress duthe year we studied it, is the "Avivim" school. The decision to plan and conduct the in-service training program was taken with neither general agreement as to the need for the program and its importance, nor after recruiting staff commitment to the process. Initially, teachers expressed skepticism about their ability to influence processes in the school. This resulted in low expectations regarding the in-service training program and lack of any sense of ownership of the processes (Fullan, 1991). During the interviews at that stage, we heard a small number of teachers responding like Dana did: "For me, the school is a place of work. I care only about my class - that is my kingdom. Beyond that, nothing in school interests me."

The major difficulty involved in introducing change in this school stemmed from the lack of trust between the principal and the staff, and between the staff and the coordinator who conducted the SFIT. Finding a way to build up trust, respect and a constructive climate of cooperation among team members, the principal and the external curriculum coordinator. was a multifaceted problem The eventual success of the in-service training program was the result of the combined effort of all involved to create a sense of partnership. The coordinator contributed theoretical, empirical and practical knowledge based on extensive experience with similar processes. She provided the staff with real opportunities for collective decision-making through open discussions where members were encouraged to voice their opinions and influence the process. It was then that the original 'laissez *faire'* atmosphere in the school changed, The teachers and the principal contributed their experience and familiarity with their school. Their complementary contribution ensured the success of the process and thus served to confirm Milstein's (1993) finding that only if all participants achieve a sense of partnership will the restructuring effort be justified.

Activities - Evaluation: In our case studies we found that many pedagogical and organizational processes occurred concurrently. The SFIT often served as a forum for coordinating and combining these processes. In several of the schools under study, we found that the unique needs revealed during staff-wide discussions served as goals for which operational directions and means of action within the school were identified.

On-going evaluation of these activities and the extent to which they served to achieve stated goals was also done as part of SFIT. Motivation for carrying out evaluation stemmed from the forum itself. Feedback served as an important tool for institutional self- evaluation and renewal in the hands of the administrative staff and the teachers, as holistic school improvement demands.

2) SFIT as a Means for Systematizing and Instituting Change

The findings of this study show that SFIT serves first of all as a framework for instituting change in the school culture. The external training course is based on a rational-bureaucratic perception which assumes that it is possible to achieve change in education from "above": the teachers are taught a good new method which they are expected to adopt. The SFIT, on the other hand, through the participation of the entire staff, encourages commitment to change. invites a wide, holistic view of the change, as well as consideration of both organizational and didactic elements. All of these demand a relationship of trust between the principal and the teachers which in itself affects the willingness of the teachers to cooperate.

Similar to change processes mentioned in the literature (see Figure 1), the present study found that readiness for change is related to the degree to which teachers agree with the purposes of the training course. When the plan for change was practical and closely related to specific conditions in the school, the need for change was clear to teachers and aroused few objections. It should be noted that these plans for change did not view teachers merely as absorbers or transmitters of the change, but rather as active partners in deciding on its nature, scope and rate of progress.

These change programs focused on staff development and thus did not fall into the pitfall noted by Louis and King (1993): "Radical restructuring that focuses on student experiences and does not directly attend to teachers' needs may generate conditions that inhibit collaboration, reflection and dialogue."

The literature also states that the actions of the principal and curriculum coordinator in showing how the change would improve teachers' educational work, increases the teachers' stake in the outcomes. Analysis of our case studies shows that significant change can only occur when lines of communication are open in both directions and symmetrical. We found that an essential condition for successful change involves restructuring managerial authority and delegating pedagogic and administrative responsibility to the teachers. This is dependent on cooperation and trust between the teachers and the principal.

In-service training which takes place outside the school leaves the individual teacher alone in trying to implement the change and usually results in gradual dwindling of implementation. In contrast, the SFIT provides teachers with a support system for implementing and instituting the change, by establishing a mechanism to facilitate discussing problems that arise during the process, reduce conflicts and thus overcome a great number of obstacles on the way.

We noted when a model for change is planned in the framework of SFIT, and examined throughout its implementation, the model is based on school conditions. This facilitates the institution of successful change.

3) *SFIT as a Plan for Professional Development*

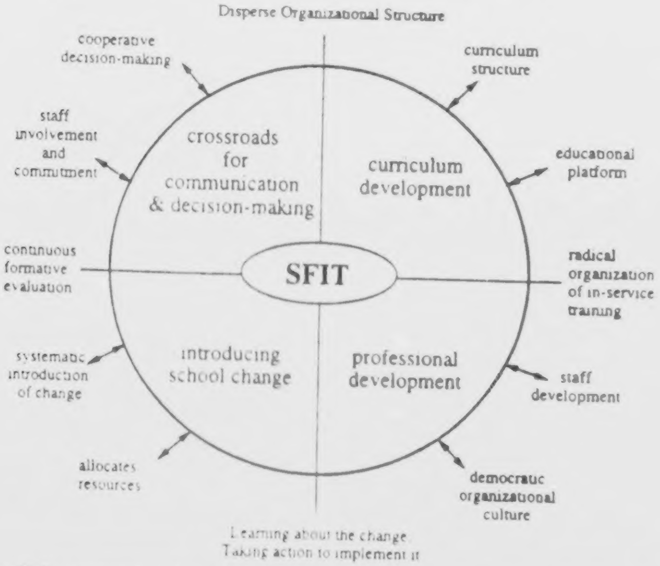
The SFIT as professional development aims to establish the necessary forums to enable teachers to increase their sense of professional cooperation through improved interaction. Unlike external in-service training programs where the content, pace and direction are determined outside of the school, the SFIT in the schools we observed enabled the creation of professional communities (Seng, 1990; Sergiovani, 1994) in which teachers analyzed their own needs, defined their objectives, related both to their commitments to the school as well as to wider educational and social goals.

4) *Curriculum Development and the SFIT*

Scheduled institutionalized meetings enabled the staff to consider the school curriculum from various aspects. Working on the school platform called for restructuring in both organizational and curricular terms. Curriculum structure is the main reflector of the school's educational effort, and, as such, it is a central concern of SFIT. The creation of the curriculum calls for a team effort, consistency and coordination among studies, attitudes and activities in the school. Investment in this complex process, in turn, greatly enhances the school ethos and creates institutional change.

To sum up the role of SFIT, we can see that it can serve both as a conceptual and as an organizational mechanism within the school. Figure 3 shows how the SFIT touches all school activities; together they act as a lever to achieve school advancement.

Figure 3: Roles of SFIT in Autonomous Schools


Disperse Organizational Structure
cooperative decision-making
curriculum structure
staff involvement and commitment
educational platform
crossroads for communication & decision-making
curriculum development
continuous formative evaluation
SFIT
radical organization of in-service training
systematic introduction of change
introducing school change
professional development
staff development
allocates resources
democratic organizational culture
Learning about the change
Taking action to implement it

SFIT is a flexible organizational frame for the principal and staff, enabling them to navigate according to the school's pedagogical and organizational needs. As we can see in Figure 3, SFIT serves as a junction for staff coordination and communication, as a curriculum planning body, as an instrument for introducing systematic. continuously evaluated, change, as well as a framework for professional growth and development. The teachers' forum in SFIT serves as a central frame for both curriculum planning and

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decision-making. Staff participation in policymaking augments staff involvement in all areas of school functioning, and increases staff accountability for carrying out decisions.

The holistic approach to processes taking place simultaneously enables the school to investigate relationships between the various changes and to combine the reneccessary for their implementation. SFIT enables the staff to study both proposed changes and their implementation and simultaneously carry out continuous evaluation which in itself contributes to the school's organizational structure The organizational structure which develops as a result of these processes is intrinsically democratic and rests on decentralization of authority.

The outcomes of professional development of teachers may be the creation of leaders who will direct the change and elevating the school staff at large. SFIT serves school curriculum planning in the widest sense of the term: defining the school's educational philosophy which directs its practice, viewing the school curriculum structure as a whole, and integrating and sequencing various curricula.

For these processes to take place, a radical change in in-service training is necessary characterized by deriving contents from the needs and interests of the school and its stakeholders (teachers, parents, students, local authorities) and adapted to local conditions.

Literate use of this powerful tool calls for a dispersed organizational structure which perceives the school forum as a responsible authoritative body that continually defines and re-assesses its goals. SFIT represents an approach which views the school as a "whole school" and aims to restructure it as a learning organization. As such, SFIT is the key to the "developing" school - an organization which simultaneously strives to achieve school objectives and teachers' professional development.

SUMMARY AND RECOMMENDATIONS

Is SFIT a key to restructuring Israeli schools? Only now can we attempt to answer this question. By mandating in-service training programs, Israel's Ministry of Education caused schools to decide how to go about implementing change.

In this study, we found a great variety in the design and implementation of in-service training programs. In part, this variability stems from the fact that initially, many principals were not aware of the potential roles of SFIT and how to utilize it for the advancement of the school. Some of the difficulties schools encounter in finding suitable external instructors for their SFITs. could be alleviated by establishing a central source of feedback from schools as to the quality of instruction of external lecturers.

We found that autonomous schools conducted their in-service training in a holistic manner which addressed the school's goals, policy, organizational structure, roles and relationships. In these schools, SFIT provided a forum in which the staff could deal with defining the school's educational and pedagogical objectives as they relate to staff, students and community. The institutionalized meetings served as a forum for decision-making and contributed toward maintaining a school culture of cooperation, of socialization for new faculty, and of developing school leadership aiming at change and improvement.

In the course of the study, we realized how autonomous schools' SFIT corresponded with school restructuring, though restructuring was not the initial goal of any of the agencies involved - the schools, the inspectorate or the Ministry, possibly because of the novelty of the concept. In other words, the SFIT represents a substantial change and a fundamental reconsideration on every level of the educational enterprise, not merely an improvement. In the autonomous schools we studied, SFIT provided elements of restructuring in that it drew on managerial theories emphasizing organizational structure and educational theories which view learning, teaching and curriculum as the heart of educational organization (Murphy, 1993). This is a good example of grounded theory and conceptual density (Glaser and Strauss, 1967) and shows how theory was field-generated, thus enriching the conceptual development of school restructuring,

We hope that schools can benefit from the cases here presented, and will learn how SFIT can serve principals and staff to advance the school and conduct quality programs. Schools and change agencies could use both the accumulated experience and theories of restructuring to make SFIT the key to improving and advancing education. But most schools can't do it alone.

From this another recommendation emerges, in the spirit of Murphy and Hallinger (1993), who referred to the commitment of the educational system, in this particular case, to prepare students for the challenges of tomorrow:

> *If the school restructuring is to have a fighting chance, there is need for support systems to facilitate the fundamental school reform and to provide a stabilizing force. Such support can come from a variety of sources: school boards, teacher unions, superintendents and other district administrators, community leaders, and externally based facilitators.*

FOCUS ON THE TEACHER: THE TRANSFER OF KNOWLEDGE PROM TEACHER EDUCATION INTO THE PRIMARY SCHOOL CLASSROOM IN BRUNEI DARUSSALAM

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1. INTRODUCTION

Placing our focus upon teachers serves to highlight the current scene in the classroom and bring our classrooms to the centre of the stage. Schools and teachers are often judged by the performance of their students in public examinations such as the Primary Certificate of Education (PCE) and the General Certificate of education (G.C.E) "O" and "A" levels. For a number of years in Brunei Darussalam concern has been expressed about the poor performance in school mathematics in public examinations. These concerns have been expressed in forums, seminars, speeches and reports by educators, planners, head teachers, and teachers themselves. Pupils have been observed to shy away from mathematics or drop it altogether when given the opportunity to do so. Despite the efforts made by Universiti Brunei Darussalam and the Ministry of Education, in a recent study analysing the performance of Brunei Primary school children in Mathematics Papers I and 2 at the end of Primary 6 PCE examination, it was noted that the mathematics performance of students was still low.

In the last Five-Year Plan (1990-1994), before the establishment of the current Five Year Strategic Plan (1994-1999), Universiti Brunei Darussalam (UBD) attempted to improve the equality of teachers and teaching through its pre-service and in-service training course, continuing the initial efforts begun with the establishment of UBD in 1985. many primary teachers have attended these courses and much experience has been accumulated If Universiti Brunei Darussalam has been successful in its mission. teachers should be able to teach more effectively The question to ask is whether the investment in money, time and effort of all taking part. namely the teachers and the teacher educators, have produced the desired result.

2. Focus on the Teacher

Research into teacher training has frequently drawn attention to an apparent discontinuity" between pre-service teacher performances in programs of training and their later-observed capability to transfer Knowledge they have learned into classroom practice Erault (1982) considers the idea that knowledge acquisition precedes knowledge application is a "false assumptions in the academic context' (p 10) Erault explains that, ***"The ability, to use certain ideas about teaching in academic essays or schools documents does not greatly increase the probability of being able to use those ideas in the, classroom " (1982, p. 10).***

Teachers are rational human beings As such they engage in the processes of thinking, making judgements, expressing beliefs and making decisions (Brown C A Cooney T J 1982) Researchers such as Nespor (1987) and Clark (1988) also suggest that in order to understanding teachers behaviours another perspective is required. That is, a perspective is needed which focus on the things and ways that teachers believe These researchers contend that few people would argue with the proposition that beliefs teachers hold influence their perceptions and judgements which in turn affect their behaviours in the classroom and therefore that understanding the belief structures of teachers is essential to improving their professional preparation and teaching practices.

3. The Study

The study was conducted from 1992 to 1994 The aims of the study were:

- to examine interrelationships between teachers' beliefs about mathematics teaching and their practice in the classroom.
- to illuminate the above in relation to the perceptions held by the mathematics educations lecturers about mathematics teaching in Brunei.

3.1 Methodology:

a) Sampling

Schools can generally be regarded as closed system so that sponsorship is required for entry In Brunei Darussalam there is a standard procedure which any researcher must follow In July 1992 the researcher wrote a formal letter to the Director of Schools Ministry of Education seeking permission to do research in the schools. I specified that it would involve interviewing and observing 12 teacher s in 5 primary schools beginning in the last week of July 1992.

Five primary schools were purposefully selected one from each *of* the four districts in Brunei Darussalam and two from the biggest district Brunei/Muara. Using the list of schools given to the researcher by the Schools Division of the Ministry of Education the researcher chose the first school from the list of schools for each of the four districts and the second school from the list of schools in Brunei/Muara. It so happened that of twelve teachers included in the study five were male and seven female; four teachers held Certificates of Education while eight were graduates.

b) Data Gathering

Interview:

To shift the locale of judgement from the researcher t to that participants. the interview technique was incorporated within the classroom observation schedule. Interviews were conducted both before and after the classroom observations. The interviews were unstructured in mature but provision was made to be certain that an agenda of topics relevant to the aim of the study would to be covered. Generally, the primary purpose of the interview with the teacher before the classroom observation was to elicit from the teacher s planning of the mathematics lesson his/her intended objectives and teaching strategies The interview after the classroom observation was to gain insights into what was going on in the classroom the teachers' explanations of what they believed to be going on, and why events occurred as were observed.

The Classroom Observation:
Each teacher was observed for two weeks. After observing and interviewing one teacher. the researcher gave herself a week to son the data collected from that particular teacher before starting, on the second set of classroom observations This schedule was followed until all twelve teachers were interviewed and observed The observations were made on selected areas that were significant to this study, such as teacher's lesson presentations' use of teaching materials. classroom management. and interaction between teachers and pupils.

It is important to note that the data collected during the classroom observations played very important part of the study, as Walker (1973) noted:

" Direct observation is, the only procedure that allow one to observe the behavior as it occurs in natural situation, thus reducing the chances of making incorrect assumptions. "

What the researcher was able to do was to use her observations to add extra pieces to the jig-saw puzzle of teachers' identified beliefs. perceptions and values.

Interviews With the Lecturers

The main task of mathematics education lecturers in Universiti Brunei Darussalan, is to conduct courses for to pre-service student teachers wit h the aim of preparing them to teach mathematics in primary and secondary, schools These lecturers are also involved in giving in-service mathematics courses to teachers serving in schools As part of their role. they are required to supervise pre-service teachers doing their practice teaching in schools.

The idea of including the lecturers as part of this study is in line with Webb et al's suggestion that researchers are likely to exhibit greater confidence in their findings when these are derived from than one method *of* investigation. They refer to this as "triangulation instruments (Webb et al 1966).

4. Findings

In the study it was found that teachers involved are still teaching mathematics with their main focus on the end-of-level examinations Another finding in this study was that the individual teacher s beliefs about mathematics and his/her beliefs about mathematics teaching was consistent with his/her instructional practices.

The findings also suggested that teachers have little real understanding of the nature of mathematics as a discipline. The teachers participating in this study admitted that they were not good in mathematics and that they had low confidence in teaching the subject even at primary levels As the findings suggest, all teachers in this study believed that mathematics consists of numbers and word problems that could be solved using the four basic operations. Their focus seems directed toward procedural knowledge of mathematics ignoring the conceptual and utilization dimensions of the discipline. It seemed to these teachers that mathematics is found in textbooks and workbooks provided by the Curriculum Development Department

The teachers' beliefs that they lacked mathematical con tent knowledge was also given by the Universiti lecturers as one of the reasons why the teachers did not use other teaching methods besides the ones used in the textbook and workbooks Their beliefs about mathematics teaching are also geared towards enabling their students to be skillful in translating word problems so that they can be solved using the four basic operations.

The lecturers' in the interviews. wanted the teachers to use activity-based methods and probably a more "child-centred" approach in their mathematics teaching. They wanted more verbal interactions between the teacher and the students and among the students themselves the fact that two of the teachers in this study grouped their students in smaller groups and most of them used teaching aids suggested that tines were aware that they were required to do so They appeared to be trying to comply with the requirement of the courses they attended in the University. but the, seemed to have lack of understanding, of how activity methods should he conducted in the classroom. In some circumstances some teachers in the study misinterpreted or reinterpreted some mathematics education terms such as 'activity methods" and 'practical methods" if the teachers misinterpret the terms. it was probably because they did not understand how to apply the methods in the real classroom situation. This should be effectively dealt with in the pre-service and in-service courses, But if they reinterpreted the terms' the teachers were probably trying to apply them to the context of their specific classrooms. while at the same time taking into consideration other constraints, such as covering, the syllabus and scheme of work and giving students lots of exercises.

The finding also suggest that the teachers' beliefs derive from their teaching experiences, particularly from those that had worked for them and the teachers before them. Therefore the teachers beliefs were developed in order to support their practices. in other words' to justify what they were doing in the classroom.

Mathematics Education as delivered in Universiti Brunei Darussalam seemed to be rejected by these teachers in favour of the above beliefs and teaching practices. It seemed that the teachers rejected the teaching, methods they learned from the Universiti for three distinct reasons:

- the teachers beliefs that they were required to cover all the topics in the scheme of work and workbooks because the examination questions are based on them.
- teachers did not understand what they learned in the University.
- pressure from the Ministry personnel and the parents and their students encouraged the teachers to teach for the sake of the examination.

Another factor which may contribute to the teachers' preferred mathematics teaching practices are teachers beliefs that students' successes and failures in mathematics are attributable to the students' lack of ability and efforts in mathematics classrooms. Teachers in this study looked at teaching and learning as two separate but highly related responsibilities.

The teachers' self perceived roles and responsibilities in teaching mathematics are:

- the teachers must cover all the topics in the syllabus they saw this as their responsibility to their students. Therefore they needed to follow the scheme of work very closely Failure to do so could make the teachers anxious that they would be blamed if the students were not able to answer some questions in the monthly tests or in the examinations.

- to supplement these required exercises, and to make sure that the students remember how to solve the problems the teachers give them in regular tests and revision practices, particularly immediately after a topic has been covered.

- the teachers had to provide chances for the students to practice all possible types of questions that were expected in tests and examinations i.e., the questions from textbooks workbooks and the past examinations. Any diversion from these types of questions was seen as a disadvantage to their students. Therefore the teachers had to look for exercises similar to those given in this curriculum guides.

- teachers needed to use teaching methods that were widely used. Changing teaching methods might disadvantage the students who were accustomed to certain methods of teaching mathematics from Primary 1.

- the teachers believed that it was important for them to be respected by their students. Therefore, it was important for the teachers to be seen by the students as the "main source of knowledge and skills."

As long as the teachers performed these responsibilities, they felt they would not be held responsible if their students did not get good grades in the examinations.

Similarly' these teachers believed that `students are responsible for their own learning. They were required to develop certain skills if they were to be able to understand the lessons. The following abilities seemed to be expected from the students in learning mathematics.

- being good in multiplication tables; better still, being able to memorise and to recall these tables as required in solving mathematics problems.

- being able to pay full attention to the teacher when they explained and demonstrated how to solve mathematics problems on the blackboard.

- being able to practice doing exercises, especially those from the textbook workbooks and the past question papers.

- being skillful in doing the four operations, this seemed to teachers to be the passport for students to get good grades in mathematics.

- individually taking responsibility for learning mathematics for doing their own work and for not interfering with others doing their work

If students did not carry out these responsibilities and they failed mathematics in the examination it would be their own faults n the teachers eyes. The students seemed to understand this divisions of responsibilities as well as did their teachers.

5. Possible Effects of the Culture on Teachers Beliefs about Mathematics and Mathematics Teaching

The culture in which the school are contained. the Education policy and the specific situational knowledge all contribute to the unselfconscious routine habits of teachers teaching and students learning. The culture has its own language. its own knowledge its own vocabulary. There are particular orientations towards the schools and towards the students. which contribute to the situation described here regarding mathematics education.

The point is that teaching and learning mathematics in Brunei should be looked at in the context of the culture where the teaching and learning take place. Interviewing the teachers and observing them teaching in the classrooms was a necessary but not sufficient basis for making judgements about their mathematics teaching. Observing them teaching in the classroom. analysing their beliefs and instructional practices in the light of the cultural context in which teaching and learning took place suggests that hat the teachers were doing was justifiable that is to say tines' saw themselves carrying out their responsibilities and acknowledging their accountability for their students' learning within the perceived limits in the highly centralised examination-oriented Education System. This might explain why the teachers' beliefs and practices are consistent and similar across the twelve teachers in this study.

The most obvious place to start the discussion of the influence of culture on mathematics education is with the teacher pupil relationship in the classroom. In this study through observations in the classrooms the students seemed to be passive recipients of knowledge, while teachers were teaching. (There seemed to be certain roles for the teachers and the students to play in the classrooms in Brunei, and these roles were acceptable to both parties.

Among the twelve teachers I observed, only two of them arranged their classes in groups, while the others kept students in rows. Nonetheless, the methods of teaching they used were similar. They accorded with the cultural beliefs that knowledge comes from teachers and it is the teachers' responsibility to set the agenda for the students' while the students are responsible for doing their own work. These teachers encouraged competition among the students through public demonstration, such as asking the students to do exercises on the blackboard in front of the other students and evaluating their own work by, for example putting up their hands if they had all correct answers.

From the standpoint of the social norms and culture of Brunei society, such practices by teachers are not thought to encourage individuality among children. In this study, even when the students were sitting. in rows, they were not allowed to discuss their work with other students It is only through close observations that the writer realized that the classroom arrangement had a great deal of significance For example the teacher almost always started a lesson by walking to the front of the classroom and standing, in front of the blackboard It was as if the teacher was signaling to the students "Let's do this (teaching and learning,) together Automatically all eyes were on the teacher, paying close attention to whatever he/she was doing, from using, teaching aids to demonstrating, problem solutions on the blackboard. Every student in the class knew that they had to "participate in the lesson, either by responding to the teacher's questionsm individually)!' or in groups (chorus answers). They were waiting for the teacher to call them, by names to do an activity. Even a n shy, or a quiet student had his/her chance to "participate"' in the lesson.

Every student was kept under the teacher's watchful eyes. Teachers encouraged the students to "participate" in the lessons by asking them to do the exercises on the blackboard in front of the other students and this times said motivated" their students to learn mathematics. When the teacher asked questions. either the students answered in chorus or they waved their hands to attract the teacher's, attention, and hand raising was one way for them to participate. Being acknowledged and having their names called by the teacher made the students seem happy.

6. Conclusions

In this study it has been pointed out that the factors which inhibited teachers in teaching mathematics were related not only to the teachers' lack of knowledge and skills in mathematics' but also to the System of Educations and the culture in Brunei Darussalam. Any attempt to introduce teachers' professional development has to go beyond attempting to change teachers' beliefs or practices. Teachers in Brunei seem to have difficult choices even if they decide to adopt the ideas they receive in pre-service or in-service courses because the teachers seem to be "moulded" into using the same "culturally accepted" methods of teaching. There are several reasons for this:

- the teachers' lack of knowledge and skills;
- the modes of thinking of the personnel in the Ministry of Education parents and the students;
- the examination systems. namely the format of the end of levels examinations:
- t he workbooks and textbooks:
- the syllabus and the scheme of work
- the culture in Brunei Darussalam.

This study has shown that it chance is to be realised, then the change strategy must co beyond the scope of pre-service and in-service teacher training in Universiti Brunei Darussalam.

References

Brown C A, Cooney T J (1982): 'Research on Teacher Education A Philosophical Orientations' ***Research and Development in Education, Vol 15 No. 4*** pp. 13-18

Clark C M (1988): Asking the Right Questions About teacher Preparation: Contribution of research on Teacher Thinking ***Educational Researcher 1 7 (2)*** pp. 5-12

Erault M (1982) 'What is Learned in In-Service Education and How? Knowledge Use Perspective ***British Journal of In-Service Education, 9(1),*** pp6- 14

Nespor J (1987): The Role *of* Beliefs in the Practice of Teaching ***Journal of Curriculum Studies 1987. Vol 19,*** *No* 4. pp. 317- -32

WalkerD.K (1973): ***Socioemotional Measures For Pre-school and Kindergarten Children.*** *San* Francisco Jossev-Bros Publishers

Webb E J (Campbell D T Schwartz R D. Sechrest L 1966) ***Unobtrusive Measures: Nonreactive Research in Social Sciences*** Chicago, Rand McNally

TEACHERS' AND ADMINISTRATORS' PERCEPTIONS OF BANKS' TYPOLOGY AND CURRICULUM GOALS IN RELATIONSHIP TO STUDENTS & INSTRUCTIONAL I MA TERIALS: SURVEY FINDINGS & IMPLICATIONS FOR PRE-K-POSTSECONDARY

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As a part of a three year project, a survey was administered to assess respondents' familiarity with and perceptions of Banks' typology of stages of ethnic identity development and curriculum goals in relation to multicultural literacy and multicultural competencies.

Teachers, counselors, and administrators across the United States and from several countries represented at the 42nd World Congress of the International Council on Education for Teaching responded to questions about their knowledge of Banks' stage theory; the source of their knowledge; their perceptions of the relevance, potential for impact, and availability of relevant materials; and, their perception of the role of publishers in relation to Banks' ideology and curriculum guidelines.

A small proportion *of* educational professionals, Pre-K through postsecondary, had knowledge of the typology. Of those who were familiar, an overwhelming majority indicated great potential in Banks' typology for enhancing ethnic identity development and multicultural literacy and competencies. Descriptive statistics on race, gender, age, years teaching, grades taught, current position, and geographical location will be provided, as well as qualitative responses of survey participants. Additional reflections of focus group members and lesson bank exchange participants in the continued study will also be provided.

Methods: Task One: The General Survey on Perceptions of the Typology

At each of several professional conferences, forums, classrooms, and a world congress the researcher was present to distribute a questionnaire by hand, rather than mail, to randomly selected groups and individuals in plenary and concurrent sessions and seminars, as well as meeting place lobbies, lounges, exhibit areas, and other locations where conferees were present and able to respond to the survey conveniently and then hand it back upon completion.

Participants. Pre- and in-service teachers, administrators, counselors, volunteers and other educational professionals of a national and international sample participated in the general survey. The total sample of N=615 respondents included a cross-sectional representation of demographic variables such as race, nationality, gender, age, grades taught, current position, and geographical location of residence. The responses within the U.S. sub-sample were homologous, since there were no region specific differences with regard to zip code representation by response, although the responses from individuals of non-U.S. nationalities did show a different pattern of response interaction. The sample consisted of individuals who indicated some interest in multicultural issues by way of their participation in professional conferences devoted to multiculturalism, diversity, or ethnicity; participation in forums on public policy for multicultural issues in school reform; participation in conferences on issues related to minority student retention in higher education and on democratization of education worldwide; and, participation in courses in pre and in-service teacher education programs that advocate support for multicultural curriculum and diversity in student enrollment.

Measurement An 11 item instrument was administered on-site to respondents and collected immediately at several different locations nationwide and at one international gathering in another country. A written copy of the protocol was provided along with standard instructions. Respondents were asked whether they were familiar with Banks' typology of the stages of ethnic identity development; what their source of this knowledge was; whether the typology seemed to capture various perspectives that individuals hold about issues of their own ethnic group and other ethnic groups; which stage would characterize most of their current students; whether they were familiar with the curriculum goals suggested for each stage; whether they thought that implementation of related curriculum would contribute to enhancement of ethnic identity development and multicultural competency; stages for which they felt there was the most and least material available in primary school curriculum; stage for which publishers should produce more material: and, stage for which they felt there was the most adequate amount of material on the market. Respondents were also encouraged to provide additional comments or ask questions. (See Appendix A for Banks' typology of stages of ethnic identity development.)

Demographics. The distribution of respondents across variables of race/nationality, gender, age, grades taught, and current position is represented in Table 1. By current occupation the majority of respondents identified themselves as either university or college professors (18 percent), classroom teachers (13 percents, school administrators (12 percent), and graduate students (7 percent), with other respondents identifying their current positions as project coordinators, school counselors, resource/special teachers, parent volunteers, retired education professionals, human relations specialists, state/district administrators, consultants, and other education related professionals, in descending order of frequency. Approximately two-thirds of respondents had previous teaching experience and one-third had no prior teaching experience. Of those with teaching experience, 59 percent had taught college or university, 4 percent taught high school only, 34 percent taught some combination of grades K - 12, and 3 percent taught pre-school.

Table 1. Demographic Demographic of Survey

Response	Percentage
Race/Nationality	
African American	27
Asian	1
European American	42
Hispanic	1
Others*	10
No response	19
Gender	
Male	29
Female	59
No response	12
Age Range	
18 – 25	12
26- 35	13
36 – 45	15
46 – 55	19
56 & over	7
No response	34
Grades Taught	
College/University	59
High school only	4
K- 12 combination	34
Pre-school	3
Current Position	
College/university professors	18
Classroom teachers	13
School administrators	12
Graduate students	7
Other education related positions/activities	50

***Includes non-U.S. nationalities**

Results. An overwhelming majority of the total sample of respondents, 82 percent, were not familiar with Banks' typology of ethnic identity development. This majority included all of the individuals of non-U.S. nationalities. Of those who were familiar, their source of Knowledge was reported as their own reading, coursework, conferences, and staff workshops in descending order of frequency. Sixty five percent of those who were familiar with the typology indicated "yes" when asked if they felt that the typology captures the essence of various perspectives that different individuals may hold about their own ethnic group and the views that they may hold about other ethnic groups.

Of those respondents who were familiar with the stage theory of the typology, on student identification, two thirds of these individuals felt that they were familiar enough to predict the provided service Thirty seven percent of these respondents indicated that their students would be raas Stage 3 thinkers (Ethnic Identity Clarification), 26 percent indicated students as mainly Stage 2 thinkers (Ethnic Encapsulation), 20 percent rated most of their students as Stage 1 thinkers (Ethnic Psychological Captivity), nine percent indicated Stage 4 (Bi-Ethnicity), five percent indicated Stage 5 (Multiculturalism and

Reflective Nationalism), and only one percent indicated that a majority of their students would be rated Stage 6 thinkers (Globalism and Global Competency).

Of those who were familiar with Banks' stages of ethnic identity development, 44 percent indicated that they were familiar with the curriculum goals suggested by Banks for each stage. The perception of the potential for a meaningful link between Banks' theory and instructional practice is strong. Ninety-one percent of respondents familiar with the curriculum goals indicated that they believed that, if the suggestions were implemented, they would contribute to the enhancement of ethnic identity development and multicultural competency for students.

Regarding primary school curriculum, 29 percent of those who responded indicated that they felt that there was more material available for Stage 3 of Banks' curriculum goals, 21 percent felt that there was more material available for Stage 5, and 18 percent indicated that they felt that there was more material available for Stage 2 of the curriculum goals related to ethnic identity development than any other stage. For the least material available related to Banks' curriculum goals, 26 percent of respondents indicated Stage 6, and 17 percent each indicated Stage 1 as well as Stage 3.

When asked For which stage should publishers produce more relevant material,"? responses were somewhat contradictory to those regarding the availability of related material in primary school curriculum. One third, thirty-three percent, of those responding indicated that publishers should produce more material for Stage 6 curriculum goals, 18 percent indicated Stage 5, and 16 percent indicated Stage 4. When asked to indicate the stage for which there seemed to be the most adequate amount of relevant material on the market, 24 percent indicated Stage 3, Stage 1 was indicated by 22 percent, and 18 percent of those responding indicated the most adequate level of production for Stage 2 curriculum goals. (See Table 2).

Table 2. Survey Responses (in Percentages) to 9 Items on Banks' Typology

Item	Response	
	Yes	NO
Familiarity with Banks' typology of stages	18	82
Of those who are familiar with stages Captures essence of perspectives that different individuals may hold about own ethnic group and other ethnic groups	65	35
Familiar with Banks' curriculum goals for each stage of typology	44	56
Of those who are familiar with goals Believe, if implemented, can help enhancement of ethnic identity development and multicultural competency for students	9	9

Cont. Table 2

Stage	1	2	3	4	5	6
Based on familiarity with stages Feel that majority of students I currently work with would be identified by	0	0	20	26	37	0
Based on familiarity with curriculum goals Feel that there is most material available in primary school curriculum for 0		0	18	29	0	21
Feel that there is least material available in primary curriculum for	17	0	17	0	0	6
Feel publishers should produce more material for	0	0	0	16	18	33
Feel most adequate amount of material is on market for	22	18	24	0	0	0

Some of the comment provided by respondents were made in the forms of advice or cautions regarding Banks' typology as follows: "Publish more on Banks' typology in "wider scope" publications." "No typology adequately captures reality." This new curriculum can't be done alone-tokenism is a constant danger." More information, materials, and training for teachers is needed."

Other comments which indicated particular interest or curiosity about the typology were as follows: " I have no idea how curriculum does this [ethnic identity development] but I'd love to find out." "I haven't learned any of this in school but obtained one of Banks' books at NAME [multicultural] conference and plan to learn myself." "I'll certainly look it up now." In this category of comments, an Assistant Director of Multicultural Services also wrote "Is this information made available in any other education/instructor training programs than for "teachers" specifically? As an African American college administrator, this information would be helpful. I've completed a M.Ed. and don't recall any mention of this."

In terms of familiarity with topologies of ethnic identity development, some respondents stated: "I am much more familiar with the Helm's model. "I am familiar with models which touch on similar themes, but not specifically Banks. Sounds interesting. "[I am] familiar with Banks' four levels of multicultural curriculum development--don't know a great deal about the six levels of multicultural identity development." One librarian stated that she was "familiar with Banks' works through [her] bibliography project on curriculum transformation." In addition, a substantial number of respondents simply indicated that they would like more information on Banks' typology. One individual indicated that they were "not entirely confident of this [that it captures essence of perspectives]--but inclined to see some value in it."

Last but not least, some other comments and questions posed by respondents indicated levels of frustration or anxiety regarding issues of race or ethnicity. In response to the identification item asking for "race" on the questionnaire, one respondent wrote This is an offensive question to me. As a Canadian, this would be illegal. . Another individual commented "We have tried to get publishers for the last 20 years to be more inclusive and move beyond the hero[es] and contribution[s] approach. Other respondents asked "Why do we always concentrate on the race of a person? We are all people on this earth-there should not be labels, and "Why do the son's pay for the fathers' sins? Why can't we behave as one group-human?" Interestingly, another individual asked "Is Banks American or British?

Methods: Task Two. The Lesson Bank Exchange Focus on Perceptions of the Typology Participants. Eight teachers were initially involved in the lesson bank exchange for phase two of this study. Of the eight teachers, three were involved from beginning to completion in providing input on their perceptions of Banks' typology through their participation in individual interviews and participation in focus group discussions. The other five teachers who were not able to participate in the lesson bank exchange to completion provided some limited input on their perceptions of Banks' typology through individual telephone discussions and their feedback during the early stages of the lesson bank exchange (discussed below in Question Two).

Ms Atobi is a young Head Start Pr e K teacher who was born and raised in Nigeria. She had been teaching the Pre-schoolers at a suburban elementary school in Fairfax, Virginia for several years when she became involved in the lesson bank exchange project. In keeping with the age group of her class, her classroom environment exhibited a broad array of visuals such as posters, three dimensional pin-ups and concrete manipulable objects such as dolls, musical instruments, play telephones and other teaching toys. Her classroom was very colorful, attractive and stimulating. Ms Atobi was very optimistic in her attitude about working with her children, sensitive to the need for a positive working relationship with her teaching assistant, and also seemed to feel that the require home visits that she made with parents was an important part of her job.

Ms. Irales is a young middle aged bi-lingual teacher who was born and raised in Puerto Rico. She had been teaching bi-lingual groups and sixth graders in an elementary and a middle school in Cleveland, Ohio for a few years and was just beginning to teach a course in Spanish to English speakmonolingual students when she became involved in the lesson bank exchange project. Ms. Irales' classrooms were decorated with picture posters illustrating positive images for her students and clever quotations on critical moral issues and values were also posted around her room and outside her classroom doors. She expressed great concern for the role that moral and ethical development would play in the lives of her students and she was also sensitive to the need for a positive working relationship with the parents and the school principal.

Ms. Elou is a young elementary teacher who was born and raised in Lebanon. She had worked as a teacher's aid and, after several years in the Career Ladder" program, she had just received her elementary teaching certificate and was teaching sixth graders at the time of her participation in the lesson bank exchange program. Ms. Flou's classroom environment was enhanced by maps and charts, since a primary focus in her instruction was social studies. She reflected a great enthusiasm for instilling pride in the Arabic speaking students and in sharing information about the Arabic speaking cultures with other students and teachers.

Each teacher had unique reasons for being interested in working with me and with each other in this project. Ms. Atobi was involved on a voluntary basis wit the district-wide multicultural task force for her school system. Ms. Irales was involved in cross-cultural activities such as teaching African and Spanish dances to students after school. Ms. Elou was a long-time district-wide interpreter for her school system and was also involved in an Arabic civic organization engaged in developing community inroads for the integration of Arab Americans into the mainstream of American life. These teachers represent a variety of racial/ethnic perspectives. Their perspectives and opinions become evident where their voices are presented in response to focus group questions in the following Results section.

Measurement During the course of the researcher's individual conversations and written dialogues with the participating teachers, questions were interwoven that were directed toward understanding their views of the teaching and learning process and environment. Questions about the nature of their roles as teachers in classrooms where they would engage students in curriculum goals related to Banks typology were focused through a triple lens inquiry of 1) the kind of knowledge they would use to engage students in curriculum guided by Banks' typology of stages of ethnic identity and curriculum goals 2) the kind of view of human beings that they wanted their students to develop 3) the social order of their classrooms and their schools.

The use of focus group discussions was guided by a series of questions that were shared with participants prior to each of three teleconference calls. These questions were more specifically focused on perceptions of particular aspects of Banks' typology of stages and curriculum goals. The questions were posed and discussions held after teachers were already engaged in the lesson bank exchange experience of developing, sharing and using related lessons for at least four months and had worked through the development of a first set of lesson plans for Stages 1, 2, and 3 of the typology The following questions were sent to each participating teacher prior to scheduled teleconferences:

> *What potential do you see for the application of Banks' typology to reading, language arts or social studies instruction at the grade level which you are currently teaching?*
>
> *Have you incorporated the cultural influences of the students home and community environments into considerations for curriculum designs that were guided by Banks' typology? If you have, in what ways have you done this? What elements did you include?*
>
> *What were the sources of instructional materials that you selected for curriculum units based on Banks' typology and curriculum goals? What were your reasons for selecting these materials?*
>
> *If you implemented instruction with the curriculum units guided by Banks' typology that you contributed to our NRRC project, how did students respond?*
>
> *What should multicultural instruction be for teachers and students?*
>
> *How are Banks' typology and curriculum goals relevant in defining multicultural instruction?*
>
> *How have your views of Stage 1 in Banks' typology changed, if any at all?*

How might you adapt the other plans contributed (by fellow participants) to your own students? How has your definition of multicultural education expanded? How has Banks' typology helped you to see new definitions of multicultural education? What should multicultural education be?

What is Banks' typology and curriculum goals trying to help people to do in teaching that the curriculum for multicultural education usually does not do?

Results

During individual conversations with participating teachers, it became evident that their views of the kind of knowledge that they needed for teaching particularly about cultures, the kinds of things that they wanted their students to learn about human beings. , and the ways that they perceived the social or" of their classrooms s and schools did vary although there were some commonalties. Some of the factors that seemed to influence teachers' perceptions and philosophies were ethnic background of the teacher, the homogeneity or heterogeneity of ethnic background of the class they taught, and the grade level of the students. The interpretations of conversations provided here are corroborated in the nature and content of the lesson plans contributed by each teacher--their conceptualizations of curriculum related to Banks' typology (discussed in following sections). Here, teachers' expressed views are represented in Figure 1.

Insert Figure 1 about here

During focus group discussions which included three of the participating teachers, in epth eflections ere hared nd hese omments evealed dditional nformation that was more specifically refuted to perceptions of Banks' typology and curriculum goals in several dimensions. Teachers' comments were also informative of the impact that the lesson bank experience had on their ways of thinking about multicultural instruction. The discussion here presents each teacher's specific responses to the focus group questions.

Ms Atobi *Banks ' typology and curriculum goals can be applied to every area of study. In reading, it is especially useful for book selection. It can help the teacher to go beyond the standard books of the school curriculum for reading, English, social studies, and mathematics. It is helpful in showing teachers ways in which they can best serve the children in a class. It encompasses all areas and makes one more sensitive to the students' backgrounds.*

I greet children in all of the languages represented in my class and identify which students' homes speak the language. I also identity all holidays observed by the families of the students in my class and the particular children who observe these holidays. I have also invited parents to come and discuss the holiday with the class and to bang books, games, and toys from their culture. For example, as an extension of this kind of inclusive learning experience we have used red envelopes to send "thank you" to the parents during the Chinese holiday.

I have developed some of my own ideas for the lesson bank exchange. Others I have adapted from the REACH program that shores materials in my district. I have also used concepts from the Anti-Bias Curriculum by Louise Derman-Sparks. For children of such a young age as mine, this kind of curriculum is scarce.

Since the children are very young, it is important to realize that this kind of instruction involves a process. It cannot be accomplished and evaluated in one day. It *must be accomplished on a gradual basis. The process has to continue and you cannot make a quick assessment.*

Banks' typology helps me to help the students be inclusive of everethnic group in the class and beyond the class. The teacher must believe in the philosophy. If they do not believe, the students will know

The typology helps me to make some additional observations about classroom atmosphere and some new determinations about book selection which depend on the individual students involved. It does not suggest a set curriculum but it does explain what kind of curriculum individuals might need. It gets you to reflect internally, instead of being rhetorical. You can focus on individual process in terms of how the child behaves or thinks and respond more appropriately. For example, when child in my class notices my change from braided hair to a head wrap and says that I "look funny, " I reply "no, I look different. "

Banks' typology and curriculum goals assists you in focusing on the day to day living of *the class and working it out.*

Stage I has enabled me to help the children to see the issues both ways. One group must acknowledge the stereotype placed upon their group by another as well as the values that they *place on the other group. Every ethnic group must acknowledge what others think of them and what they think of others. This is a very delicate stage. The assistant in my class may feel offended. I have to be sensitive and get everyone to buy in. I have to work on validating each child.*

Ms, Irales. *I agree with Ms. Atobi one hundred percent. The topology helps you to take the opportunity to acknowledge students. It can be used in reading, social studies and science. In order to develop concepts related to the issues for each stage your approach must be interdisciplinary. In cultural dynamics, we must see a parallel to curriculum change.*

The prior experience of my students is an important factor. It is difficult, at first, to teach about racism or prejudice. Although the students have had related experience, they don 't know how to define or express them.

I try to create something new. I address current issues while developing communication skills and social skills through cooperative learning and role playing. I see the need to help *students to feel like change agents. I need to help the students to transform the curriculum.*

Banks' topology has helped me to realize the lack of multicultural curriculum. Students needsocial skills and decision making skills for social action. For example, we need biographies of people from the community. Our history texts are not relevant to reality.

Students seem to feel intimidated. They seem to feel that there is prejudice against their own group and they express prejudice against others. They have hostility. They don 't know how to cope. They don 't seem to feel the freedom to express themselves--they feel ashamed. They need much more work on this, in continuity. Without another teacher to continue this focus, they are lost. There are misconceptions. There is peer pressure. They feel intimidated by other groups.

There is a need for a reform movement to empower students and teachers with the skills and commitment needed to make society and the world more responsive to human conditions of all students, of all races, and all social classes. This curriculum reform should not be just for schools with ethnic or racial mix. It should be applied even where the class is homogeneous in background. The teacher must learn to be a facilitator or guide.

As in anthropology, Banks' typology indicates that the student must have clarification before they can truly develop multicultural and global values. Banks' goals are very relevant.

It is important to have guidelines like these in order to reach the goals for multicultural education.

Stage I, at first, seemed to be just introductory I now realize that it is the cornerstone for the entire topology. I have the responsibility of helping students to face other individuals' thoughts, helping them to realize their position in terms of how others regard them, and then helping them to face the challenge of acknowledging the problems caused in society because of perceptions of a student's culture. [Ms. Atobi asks "Why?"] (Response) Then we can define ourselves better.

I would adapt all of the lessons contributed by others in some way. The students must realize that they are linked to each other. For example, the stereotypes of Puerto Ricans can be applied to the whole group of Spanish speaking ethnic backgrounds.

Ms. Elou, *Banks' typology is very interesting for social studies. It can be put to good use there. It has rich possibilities.*

I have incorporated students' home environment in terms of cultural beliefs and traditions particularly traditions. For example, there was a teacher who told students not to touch all of the food that was set out on a buffet table -- for sanitary reasons. In response, I developed a lesson that included discussion of the way that Arabs eat--we touch the food and share a big dish. This is a tradition at home. I have also addressed how traditional beliefs at home such as fasting for Ramadan may be in conflict with test-taking strategies such as eating (for energy) before exams.

The resource that I have used for contributing to the lesson bank exchange is the material that three teachers in my district developed for the bi-lingual program.

The students in my class are ethnically heterogeneous. The English speaking and bi lingual students all seemed to appreciate and understand each other better in working through the stage lessons.

I agree with Ms. Irales that multicultural instruction should be integrated into the curriculum in every subject area. It should involve all ethnic and racial groups in the school and community It is most important, when starting, to address the home background, then the community, then the city, and then beyond. This is a specific part of the philosophy of the Arabic speaking people. Banks' has included all of the steps necessary for starting.

Stage I is very important. Each group needs to identify the negative as well as positive aspects. The curriculum for this stage can provide the opportunity to deal with stereotypes. For example, I have observed that people of my culture (Arabic speaking) used to be aggressive about assimilating, but over the past ten years they have shown that they want to change this way of thinking. Stage I theory and goals empowers one to plan lessons without always focusing on pride first.

Most of the other lessons that teachers have contributed to the lesson bank exchange can be adapted for the students that I teach. We just need to speak in terms of ethnicity instead of race.

Researcher's Commentary

Most of the teachers whose voices are presented here were selected for Phase Two of the project because they and their students had been participants in Phase One of this study, in which baseline data was collected on students' ethnic identity orientation, reading engagement level, and locus of control and on the content of instructional materials and story discussion used by teachers to provide instruction related to cultural issues. The school sites were selected to obtain a cross-sectional sample by demographics such as region, ethnicity, socio-economic status, and grade level and ability. I was in constant contact with the participating teachers by way of on site visits and telephone conversations. During my initial visits to sites, I provided teachers with an orientation that included an introduction to Banks' typology of the stages of ethnic identity and left supplemental materials win teachers for further review, before they decided that they would be committed to participation in the project. Teachers were informed that their participation would require that they submit a monthly audiotape of an instructional session in which they engaged students in story discussion that was culturally related if possible, but they were not required to adhere in any way to the principles of Banks' typology and curriculum goals. The instructional material would be of their own choice.

In Phase Two, reported here, teachers were selected from those who had participated previously in Phase One of the study, with the exception of three teachers at one new school site which would expand the range of grade levels covered in the project to include high school. (Phase One of the study involved the collection of baseline data on the nature of elementary and middle-grade students' reading engagement level, locus of control, and stage of ethnic identity development [based on Banks' (1981) typology of ethnic identity], and data on the extent to which selected literature and the instructional interaction in these students' classrooms included content relevant to the curriculum goals of Banks' typology (Tomlinson, 1995, 1996a). In the inception of Phase Two, the following steps were taken. All teachers were provided a review of Banks' typology of the stages of ethnic identity development and related curriculum goals. They were informed that their participation would require that they develop lesson plans guided by Banks' typology, that, in exchange for their contribution, they would receive copies of all lessons developed by other participating teachers, and that they would be asked to return a feedback sheet for each lesson that they received. As a last step in the cycle, teachers would receive copies of the feedback related to the lessons they contributed before submitting the lesson for the next stage of Banks' typology. The project was referred to as the "lesson bank exchange," since participants would be acquiring a collection of lessons that they might adapt for future use.

My role in the processes of Phase Two was to facilitate the exchange of teacher developed lessons and feedback sheets, interpret and support any teacher feedback (from sender to receiver) that would assist the receiver in the improvement of subsequent lesson designs, respond to any questions that teachers posed, and provide supplemental material or additional feedback when requested or when determined that it would be helpful to a participating teacher.

Discussion

The utility and generalizability of Banks' typology and its potential for application to practice is supported by a substantial proportion of individuals who indicated that they did consider the stage theory to be realistic in capturing the spectrum of views that individuals hold about their own and other ethnicities. A large majority of respondents also felt that implementation of the curriculum goals would enhance ethnic identity development and multicultural competency for students. Another voice of respondents is one which indicates that training based on the concepts explored here should be more widely implemented and that information on Banks' concepts should be more widely disseminated through publications that are broader in scope.

These perceptions indicate the viability of this theoretical framework as a model for guiding professional practice in teaching, counseling, and administering the development of curriculum and instruction, particularly for multicultural contexts. Although there have, indeed, been numerous workshops and presentations devoted to multicultural issues that have included or features Banks' theoretical contributions, there is still much work needed in addressing ways in which the theory and related goals can be put into practice concretely. A more purposeful and precise examination of the stage theory and curriculum goals could provide needed direction for the development of curriculum guidelines that would also enhance the professional development of individuals who will be responsible for delivering instruction that is multicultural in context.

The data indicates that staff development was the least often cited source of knowledge for familiarity with Banks' typology although multicultural issues seem to be popular topics on the agenda for school personnel training. Responses reveal a need for a greater effort to incorporate Banks' theory and curriculum goals into staff training and development on multiculturalism and diversity. Where many more respondents cite their own reading, coursework or conferences more frequently as sources of this knowledge it is clear that a substantial number of education professionals who might benefit from exposure to the theory and curriculum goals are left to do so at random, rather than in the more concentrated and targeted kind of opportunity that is available from those who are responsible for programming personnel training

Interestingly, individual predictions of the stage of thinking that would be characteristic of most of the respondents' students or clients is supportive of the findings in Phase One of this study (Tomlinson, 1995). A substantial proportion of respondents indicated that they believed that most of the students (or clients) that they work with would be rated as Stage 3 thinkers while many other respondents perceived their students as primarily Stage 1 or 2 thinkers. Students who participated in Phase One of this study did show this pattern of stage ratings. This finding further substantiates the need for a closer look at Banks' theory and curriculum goals for Stages 1, 2, and 3 in terms of addressing the related issues in the training of teachers and other professionals who will select curriculum materials and facilitate instruction or other developmental experiences.

The enhancement of ethnic identity development and multicultural competence for teachers as well as their students does require that instruction that is multicultural in content be appropriately multicultural in process. Perhaps, where students are considered to be primarily Stage 3 thinkers, it is likely that they have only been exposed to processes that address multicultural content in the superficial celebratory and additive ways rather than the deeper analytical approaches. Teachers need to be equipped to engage students in an analytical exploration of content that addresses the issues of Stage 1, 2, and 3 thinking for matters related to the ethnic groups represented by their students before immersing them in the exploration of numerous other cultures. Additional data collected in this study does indicate that there is an ongoing propensity toward multicultural curriculum that reaches out to numerous ethnic groups other than those represented by the students receiving the instruction, while aiming at goals and objectives characterized by Stages 4, 5, and 6 rather than first embracing the students' ethnic heritage and the issues that are a part of their legacy through goals and objectives characterized by stages 1, 2, and 3. This phenomenon was observed at the early grade levels as well as the more advanced grade levels.

References

Banks, J.A. (1981). Multiethnic education: Theory *and practice* Boston: Allyn and Bacon.

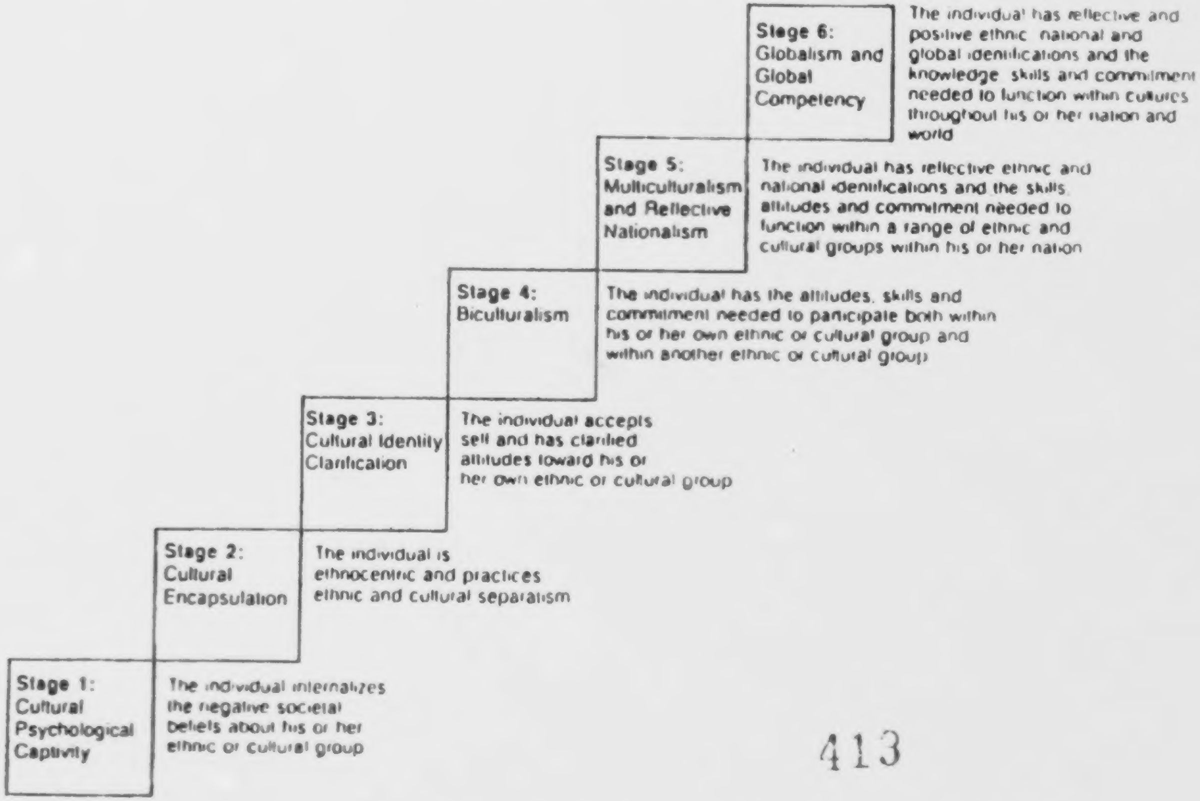
Tomlinson, L. (1995) The effects of instructional interaction guided by a topology of ethnic identity *development* Phase one. (National Reading Research Center). Research Report No. 44. OERI, U.S. Department of Education.

Tomlinson, L. (1996a) Applying Banks' typology of ethnic identity development and curriculum goals to story content, classroom discussion, and the ecology of classroom and comma : Phase one. Instructional Resource Report No. 24. OERI, U.S. Department of Education.

Teachers & Class	Teacher Knowledge *for Pupil View* of Humanity in School Order		
African Pre-School (other ethnicity, heterogeneous)	grade-level appropriate strategies/ concrete art activities/ language in rhymes, songs, contributions	is good/ must be positive, melting pot, assimilate	continuous development/ constrains of system guidelines on units goals/ flexibility within units
Arab Middle School (same ethnicity, homogeneous)	ethnic group issues/ range of grades/ concrete and abstract activities/multi-disciplinary/ art, artifacts, literature, additive	has issues, must resolve and develop self-image to share, pluralist	continuous development/ student needs orientation/ responsive to building goals and cultural exchange
Puerto Rican Middle School (same ethnicity, homogeneous)	ethnic group issues/multi-grade focus abstract and concrete activities/ literature and logic/ addit-trad/ soc. act.	has issues, must resolve must use the community as resources and develop positive view of citizenship, pluralist	continuous development/ flexibility/ student needs orientation/ responsive to classroom goals and multigrades

Figure 1. Varying teacher views of important knowledge for self "d students within a perception of school structure and climate as expressed in project exchanges

Figure 5.1. The Stages of Ethnic and Cultural Development


Stage 6: Globalism and Global Competency
The individual has reflective and positive ethnic, national and global identifications and the knowledge, skills and commitment needed to function within cultures throughout his or her nation and world
Stage 5: Multiculturalism and Reflective Nationalism
The individual has reflective ethnic and national identifications and the skills, attitudes and commitment needed to function within a range of ethnic and cultural groups within his or her nation
Stage 4: Biculturalism
The individual has the attitudes, skills and commitment needed to participate both within his or her own ethnic or cultural group and within another ethnic or cultural group
Stage 3: Cultural Identity Clarification
The individual accepts self and has clarified attitudes toward his or her own ethnic or cultural group
Stage 2: Cultural Encapsulation
The individual is ethnocentric and practices ethnic and cultural separatism
Stage 1: Cultural Psychological Captivity
The individual internalizes the negative societal beliefs about his or her ethnic or cultural group

The stages of ethnic and cultural development. From J.A. Banks, *Multiethnic Education: Theory and Practice*, p. 220 (Boston: Allyn and Bacon, 1981). Reproduced with the permission of the publisher.

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SCHOOL RULES: SOME TENSIONS BETWEEN STUDENT TEACHERS' NEEDS AND SCHOOL POLICY AND PRACTICE

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There is common agreement that 'discipline' is an Import element In the ways In which we fudge a school and that what we often prefer to call classroom coned and management skills' are considered to be an important part of the range of skills that we *expect teach to exhibit.* As teacher educators It is therefore understood that we hew imparted these skills (at last at the survivalist level') to our student teachers and there is a very rich and varied literature (Slee, 1905) available to the education professional about what we mean by 'discipline' and methods by which we achieve it in the classroom The subject of school discipline is one on Which everyone ha. a view from the vast and intellectually challenging work d critical theorists such as Foucautt (1979), Bernstein (1990), and Bourdieu and Passeron (1990), who argue that the ,way in which we think about discipline are pan of the ways in which the distribution of power In society y reflected In the way that we Interpret truth, to the Man on the street who firmly believes that schoolchildren are becoming more unruly and mat It's about time that teachers and schools did something about it. Every one has a view on children's school behaviour.

In the Brunei context it is often stated by foreign or expatriate teachers that truly represent a "haven of peace (Darussalam)" compared with those they may have previously experienced In their home countries Indeed, those working in school and colleges Southeast Asia often contrast the 'havens of peace' they work in with the Images we have through our satellite TVs of the violence and disorder so often portrayed by the western media as the norm in the state schools of some western industrialised countries . And yet, as research shows it is repetitive patterns of low-level disruptive behavior that lead to low academic achievement and high levels of stress for both pupils and teachers. Such behaviours as 'talking out of turn', calculated idleness or work avoidance hindering other pupils' and 'making unnecessary (nonverbal) noise' (DES,1989) are the dripping taps that erode the academic and social curriculum of the classroom and there no reason to believe that they are absent from Bruneian classrooms in the primary or the secondary sectors. Given that Brunei has achieved most of its quantitative targets educationally as there is tree education for all citizens who aspire after from the pre-school to the tertiary level it is Governments main thrust now to improve the system as performance indicators at all levels indicate that quality needs Improvement (Ministry of Education,1993). It is by way of to the the qualitative improvement the teaching force that this small pilot research project was developed, keeping In mind the starting point given in the DES document that The behaviour of pupils in a school is influenced by a most every aspect of the way it Is run and how it relates to the community it serves' (DES, 1989). As indicated by the work of Watkins and Wagner (1987) different patterns of behavior among pupils can be observed at three levels (a) the organisational level, (b) the classroom level, and (c) the individual level, with different patterns of intervention and understanding being required at each level. This study is mainly concerned with the actions of preservice primary school student teachers at the classroom level but it reflects some of the concerns they felt both about 'discipline' at the organisational level and at the level of individual pupils.

Primary Teacher Education In the Sultan Hassanal Bolkiah Institute of Education

Primary student teachers follow one of two programmes at the Sultan Hassanal Bolkiah Institute of Education (SHBIE), a 3 year Certificate of Education (Cert, Ed.) or a year Bachelor Degree d Primary Education (BA Pr. Ed.), both programmes offering Strands M Malay and an English medium stand. Both programmes prepare students to teach In the Upper.Primary School to Levels 4, 5 and 6 which would normally cover the pupil age range of approximately 8 to 12 year. All primary education students follow a common core programme of Pedagogical Studies (PS) coordinated by Professor Sim Wong Kool and team-taught by lectures drawn-from all departments of SHBIE. I However, this paper will deal only with students following the Certificate of Education who are In their final year.

There are three PS courses, two taught in the first two semesters of the students' first r and one further PS course taught in their final year all three courses are 'aimed at preparing students to become Skillful, Informed and Reflective Strategists' (Handbook,1995) and are designed to link with the main Teaching Practice sessions of 6 weeks each in years two and three. In PS II, taught before the first major Teaching Practice in year 2, students cover among other topics 'Management of Learning, such as managing mixed ability groups managing time-on-task effectively and managing disruptive behaviour'. Among the references died for this course are Bauer (1991), Bennett (1993), Jones (1990) and Wragg (1993).

Reflective Strategists

Louise Stoll acknowledges that teachers 'are action-oriented practical people' and further notes that given the multitude of demands made upon them by their ministries their principals the changes in society being brought into the classroom let alone new or updated curricula, that It is often to do you have always done…than develop new strategies or evaluate current one to see whether they address teaching goals'(Stoll,1996). It is to break with this laissez-faire background that SHBIE has embarked upon a deliberate strategy of seeing Teacher Education at SHBIE as the first step in on-going professional development In which teacher based classroom research will make teachers more skillful and better informed. (Sim, 1993)

There are two ways described by Elliott (1991) in which teachers engage in reflection on their practice for self-development, the first requires the teacher to research on a problem In the classroom leading to a change in practice. i.e. reflection leads to action. In the second action initiates reflection in that some aspect of teaching is changed in response to a classroom problem and the teacher self-monitors the effectiveness of the change or strategy and so gains new understanding of the situation In this study the second approach is used to examine the Impact of disruptive behaviour in the classroom on student teachers perceptions of teaching and some amellorative procedures are drawn from course texts to assist student teachers develop new strategies to cope with classroom management problems

In an earlier paper McMurray noted that there were wide ranges of confidence expressed by graduating students from SHBIE relating to their ability to perform general teaching tasks, with marked differences noted over responding appropriately to disruptive pupil behaviour; almost half the respondents from one programme feeling uncertain about how to dead with disruptive behaviour (McMurray, 1990) Part of the problem derived from a lack of consistency among the school organisations as to how to deal with disruptive behaviour . Although there are the usual Ministry guidelines for principals and teachers or how to deaf with gross behaviour and there are clear indications among teacher and parent groups s to what is unacceptable pupil behaviour in the Brunei context, there appeared, according to student and inservice teacher reports, to be a fairly ad hoc approach among schools on how to deal with the more repetitious examples of poor behaviour. And yet it is lust this type of behaviour that teachers complain that they spend too much time on, for instance as et al (1996) reports over 50% of teachers In the UK consider that they spend more time than they ought on matters of order and control and the E Elton Committee (DES,1989) confirmed in their major Investigation of discipline In UK schools that while examples of physical violence against teachers were few, there was often continuous disruption with talking out of turn and hindering other children being major types of disruptive behaviour. Such behaviour it is suggested by Wheldall and Merrett (1988) is time washing irritating stressful and, ultimately exhausting for teachers'.

Student Teachers' perceptions of discipline of in primary schools and of the disruptive pupil behaviour

In Brunei there is an expectation that certain forms of conduct will be conformed to, especially public conduct and traditional courtesies and such behaviour Is taught through various programmes of moral educator, now mostly conducted through Civics. Ugama and the recently articulated national philosophy of the Malay Islamic Monarchy (MIB). Thus it expected *that* schoolchildren will obey school rules , respect teachers and community leaders, respect each other and be bye to the school and the nation. This is reinforced through MIB, counseling in schools, and through the use of sanctions and punishments inside and outside the classroom, commonly resorted to but often unreported and little researched.

The research reported here preceded and continued into the final Teaching Practice in 1996 (although it involved their recalling the circumstances of their Teaching Practice in 1995) for the 1993 intake of the Certificate of Education students, The number Involved was 49 students and the intention of the study was not only to find out about behaviour in a sample of primary schools but also to share with student teachers Information about their school and to see whether together they could effect worthwhile change in their understanding of the nature d discipline in their classrooms and in the ways in which they respond to issues of classroom contra and management

Method

A questionnaire was distributed to primary teacher education students who wore in their final semester of their final year of the Certificate in Education programme prior to their commencing their final Teaching Practice.

Questionnaire 1 (Appendix 1) was administered as part of an exercise in examining classroom management and control during a course on the Sociology of the School and was In two parts Part A dealing.with their judgements about how well they managed *their* classes on Teaching Practice 1 (at the and of the second year), how well they established rules and relationships, and the nature of rewards and punishments that they used and observed while on Teaching Practice . Part B asked them to list the kinds of behaviour that they found most frequently to be disruptive in their classrooms This questionnaire was based on the work of Merrett and Wheldall (1988) and the Report of the Elton Committee (DES, 1989). From these sources a list of behaviours was drawn up that seemed to be relevant to me local context and the students were asked to rank these behaviors according to whether they were disruptive to teaching and learning in the classroom (See Appendix 1 P arm A and B.)

The first administration of the questionnaire (parts A and B) was based on students recall of their experience of teaching in schools on their previous teaching practice (TP1) six months earlier and was completed and analysed and discussed as part of their coursework. The second part of the work only entailed their completion of Part B for a second time at the end of their final Teaching Practice (TP2) and it was then handed in to the supervisor.

Results

On the first questionnaire given as part of the student's course there appeared to be no problems In recall and verification was by cross-referencing with each other. As part of the object was to demonstrate to them that they had already built up a very complex series of Impressions about teaching skills the amount of recall they were ebb to achieve was both very gratifying and suprising to them the first exercise involved their perceptions of the relative Importance of some non classroom management skills listed below in Table 1.

Table (1)
Percentages of preservice student teachers' perceptions of the relative Importance of some class management skills (n=49)

Class management skill	Most Important		Moderate Important	Least
Effective lesson beginnings	55		36	10
Appropriateness of tasks	39		37	24
Questions and explanations	37		45	18
Preparation of lessons	35		35	30
Teaching manner and relationships with class	35		29	36
Response to pupils' work and behaviour	33		51	16
Vigilance and awareness of what is going on	27	35	38	
Transitions born one activity to another	10	27	63	
Effective lesson endings	8	29	63	

Table 1 indicates the relative importance to the group of various classroom manage skills and unsurprisingly given the lack of experience of me group their main concern is with getting the lesson started. Indeed, there is no surprise that the first five items all deal with getting started, having something that they and the pupils want to do, befog able to ask questions and answer and (giver, the threat of the supervisor at the door with lesson. It may seem surprising that ending a lesson is seen in such a lowly position but quite commonly at stage (TP2) students are so concerned with getting the lesson going and keeping it going that time management in terms of arriving at a neat conclusion is not seen as a priority. Similarly, although inservice teachers will often rate 'Transitions' as a problem area because they are ebb to deal with several activities in a lesson, student teachers at SHBIE are usually more cautious in their lesson planning and do not have too many transitions to make and so have not yet experienced its difficulties,or else they avoid transitions as far as possible because they can foresee difficulties.

With regard to Exercise 2.1 (Relationship) most students found plenty of external reasons for the state of their relationships with their classes. Such things were several times mentioned as pupil motivation, the class organisation (whether streamed or unstreamed), nature of the syllabus to be taught, the social class of the community, me Interference of the SHBIE supervisor or the class teacher. Only a few, mostly females, were able to Insert themselves Into the framework of the relationships of the classroom, perhaps because of the transitory nature of a six week long teaching practice. Indeed,several students commented that had they been at the School for a whole term they were sure that they would have dmuch more meaningful relationships with both the pupils and their teacher colleagues.

Interestingly, most of the rules mentioned by the group under Exercise 2.3 (Rules) related to activities mentioned later under Part B regarding disruptive behaviour Rules concerning raising the hand when a pupil wishes to speak or answer, not leaving their seat without permission, paying attention, respecting each other, and punctuality figure highly among the rules that students try to employ in their classrooms However, most admit to only partial in getting compliance with their classroom rules mainly, they claim, because pupils don't listen to e teacher or are Inattentive in other ways. To a certain extent the students calm to be victims of the school culture, for Instance, In some schools punctuality and such activities as eating In class may be dealt with more leniently than in mother school or even between different supervising teachers In the same school. Very few showed evidence of considering how they might change the way In which they set the rules for their class and most take it as something determined 'out there' by the school leadership or by institutional custom, the culture of the staffroom.

With regard to Exercise 3 (Rewards and Punishments) a very wide variety of rewards and punishments are reported It Is clear that as with discipline some primary schools have written guides as to what is recommended and what is frowned upon but that even in those schools individual teachers show to the student teachers a wide range of behaviours, some Innovative and some even bizarre. Rewards at the school level invariably involve some form of public recognition, either at an assembly or by displaying good work In a public place or perhaps rewarding by giving some school position. All students reported that their schools valued and recognised good good as well as scholastic and sporting achievement In the classroom most classrooms showed evidence of displays of work and public acknowledgement by the class teacher of outstanding effort and achievement. Many students reported Instances of Instrumental rewards such as the giving of stare and team contests over a week, often,rewarded with sweets and drinks or even picnics But a substantial number reported that the teachers they were with only, gave praise- or conversely criticism.

Many students reported that schools,had a booklet for parents containing the school policy on punishment which in some cases forms a contract with the parent who dyne the booklet to indicate agreement. Severe punishments reported may Involve some forms of physical chastisement (although corporal punishment is forbidden by the Ministry of Education), withdrawal of privileges, and ultimately suspension. Such measures are usually invoked only for serious offences such as fighting, vandalism truancy, stealing, smoking and substance abuse it is clear that most students were aware that there were dear procedures in place in most schools for dealing with serious misbehaviour and that these were cases whore the senior start should be involved. They had been informed of this situation by the Headteacher and SHBIE supervisor.

At the classroom level student experience was much more eclectic. Although there were a common range of punishments involving withdrawal of privileges (e.g. staying back at playtime), being placed under dose surveillance by the class teacher, sending a note to the parents, and being given socially useful tasks such as cleaning cupboards or the furniture there were many instances of punishments that were humiliating Involving exclusion and sarcasm or ridicule; that were painful involving physical actions such as pinching, dancing In the sun, holding weighs; or that were even potentially dangerous such as being made to stand on top of place of furniture In all cases SHBIE students were able to understand why such action had been taken but at the same time were able to suggest alternative and less draconian measures that could also have been used.

Disruptive Behaviour

Using the table derived from the Elton Report (DES, 1989) as a guide (Appendix1,Part B) students were asked to report whether any of the behaviours listed occurred frequently in their classroom (i.e. at least once a week or more) and to add any other disruptive behaviour which occurred. A disruptive behaviour was taken to be one that would Interrupt, even In a minor way, the natural flow of the lesson and that could be of a mild nature, as is the case of most disruptive behaviour The students could tick as many items as they wished.

It is clear from the responses that SHBIE students did not frequently experience any serious or gross forms of disruptive behaviour. The particular pupil behaviours that that group most frequently encountered (see Table were below were out king out of was which by al the group, 'disturbing other pupils' and 'avoiding doing work' being mentioned by nine out ton students and moving around' and general messing about while seated' being mentioned by eight out ten students. No instances of aggression to other pupils or to the teacher nor of verbal abuse to other pupils or the teacher were reported as occurring frequently, which may reinforce me reputation of Bruneian classrooms as being relative 'havens of peace'!.

It would be too much to expect that no instances of gross misbehaviour ever occur and in Table 3 below, the most commonly cited forms of most disruptive behaviour are shown. These are behaviours that Interrupt the lesson such that action ha to be taken by the teacher to stop the behaviour i.e. it is serious enough to halt al proceedings for a time but perhaps only for a short time. Again, as students were given a tree choice as to how many to tick, these figures reflect the percentage of the group noting those types of behaviour that occurred In their classroom that were the most disruptive All students ticked at least one behaviour, Only a small proportion (22 per cent) reported aggression towards other pupils but obviously even if it only occurred once it could be a significantly dramatic incident.

In the student teacher s d classroom. None of the students reported physica aggression by pupils directed towards themselves and less man one in ten reportec verbal abuse directed towards themselves or to other pupils.

Table (2)
Most frequent types of disruptive pupil behaviour reported by preservice primary school student teachers' on Teaching Practice 1. (1995)
(p=49 figures In percentages
'Frequency' means being observed at bad once a week

Type of disruptive Behaviour	Percentage reporting behaviour as frequntly occurring
Talking out of turn	100
Disturbing other pupils	92
Avoiding doing work/delaying starting etc	92
Moving around/leaving desk	88
Genera 'messing about' while seated	86
Making unnecessary noise	75
Lack of punctuality	60

Table 3
Most type of reported by primary school student teachers on Teaching Practice 1. (1995) (n=49) Figures In percentages.

Most disruptive behaviour	Percentage reporting
Talking out of turn	92
Disturbing other pupils	82
General unruly conduct	72
Avoiding work	60
Lack of punctuality	53
Impertinence	39
Aggression towards other pupils	22

'Disruption' was defined by the students as meaning that the progress of the lesson was disturbed by the event(s) for a significant period.

As with frequency of disruptive behaviour 'talking out of turn and 'disturbing other pupils' were the behaviours that the majority of student teachers reported as being the most disruptive. It is interesting to note that 'general unruly conduct' is reported by 72 per cent of the students whereas 'general messing about' while frequent is not seen as 'mod disruptive'. This presumably is because unruly conduct is generally not done while seated and involves both moving around and physically interfering with other pupils and so has the potential for creating a much more serious situation. 'Impertinence' Is relatively rare between children and adults in Brunei society and so any kind of cheeky or impertbehaviour which may be overlooked in other cultures may well be picked up as potentially disruptive behaviour, especially for a student who could fear the escalation of such behaviour into even worse behaviour.

Group Discussion on the results

During the period of feedback on the above data with students taking Sociology of the School, it became clear that many students were uncertain as to how to set rules and tended to believe that these 'rules' were part of the job of the school leadership and that the school's punishment system should be able to take care of this aspect of school life thus allowing than to get on with their 'main job' of teaching. It was also dear that all the schools had similar rules for pupils behaviour our and similar sanctions when these rubs were broken ranging from warnings and verbal rebukes and 'looks' for minor offences to lines, extra work and punishment exercises for more serious offences and to suspension and ultimately exclusion for the mod serious offence. However, at the classroom level for the student teacher it was agreed that the basic prerequisite, not only to classroom but to good discipline is establishing a 'good relationship' For this purpose we found Pollard's (1985) definition of a 'good relationship' helpful where he says: 'it is perfectly possible to analyse a "good relationship. as a set of understanding which have been socially constructed through classroom Interaction. The critical point here Is mat both teachers and pupils must recognise the basic concerns of me other).' Further to this it was noted in the Elton Report that many teachers lack the sorts of group skills that would enable them to establish the right kinds of respectful relationships. Consequent upon this discussion the group decided that It wished to find a way of enabling themselves to establish a set of ground rules for their own classes (i.e.. their own rules and to this end a section of the course which was examining teacher and school effectiveness studies set aside tutorial time to examine the work of Wragg (1984) (the SHBIE external examiner, Neville Bennett is a colleague of Wragg at Exeter University) with regard to the 'Circle Approach' which emphasises providing a supportive context for class discussion and Wheldall and Merrett (1989) with regard to their concept of 'Positive teaching'. The latter approach emphasises that teaching is concerned with the observable so don't focus on things you can do nothing about; that almost all classroom behaviour is learned and that therefore bad behaviour can be unlearned that learning involves changes In behaviour and mat changes In behaviour which are followed by desirable or rewarding consequences are likely to be repeated; and that behaviour is influenced by He context. The strategies implied by these various authorities discussed and simulated In tutorials and video programmes born the BBC Education series Teaching Today gave fruitful and relevant examples of the approaches at work with practicing teachers but In a UK environment.

For the purpose of this paper the main effect of this short unit of work was to allow student teachers who had reflected on a particular aspect of classroom management, disrupt behaviour, to practice *some* strategies to help avoid difficult situations In the future and also to relieve their classrooms of *the* constant Interruption from the mild disruption mat is pan of the daily life of many *teachers* . Essentially *the two* main strategies which in fact all the students tried In their subsequent teaching practice (TP2), was :

(1) to concentrate In their management skills on: getting them In; "sting on with them; getting on with It; and getting them out and rewarding desired behaviours with praise(Wheld all.) and (2) to use the circle approach to get their classes and them *to* jointly *agree* on certain behaviour In the classroom which became the Golden Rules for that classroom Pupils were supposed to devise through circle time activities those forms of behaviour *that they wished to* have both for themselves and for others. In this way pupils and teachers are encouraged to think more about their own behaviour and its effect on others In the manner suggested by Pollard.

Both these are put in the context of classroom management skills that are underpinned by a strategy of prevention rather than cure. As Brophy states:

it is char from research that the key to effective management is prevention. Effective managers are distinguished by their success in preventing problems from arising rather than by special skills in dealing with the problems once they occur.' (1987).

Teaching Practice 2: Follow-up

Upon completion of the unit on classroom management the student teachers were sent Immediately went out on their final six week long teaching practice (TP2), taking with them Part B of the questionnaire which was returned to SHBIE at the end of their TP. Unfortunately as they were then graduating, there was no opportunity for formal feedback on me success of the implementation of the management strategies , although informal contacts during TP supervision and requests for advice during supervision, suggest that they and their teaching colleagues took the opportunity to use the strategies to establishing good relations at the start of their TP.

Analysis of the returned questionnaire reveals change In pupil behaviour Although 'talking out of turn and disturbing other pupils' remain most frequently reported, though with some reduction, all the other behaviour types mentioned as most frequent or Teaching Practice 1 are significantly reduced. Whilst this could be put down to the use of the twin approaches , it could also be duo to the tact that the students hew gained mom confidence this time round and are determined in the second TP to do things differently this time round, I e. they have resected on their situation and have sought to change their actions.

Table (4)

Most frequent types of disruptive pupil behaviour reported by preservice primary school student teachers' on I+Teaching Practice 2. (1996) (n=49) Figures in percentages. 'Frequency' means being observed at least once a week

Type of disruptive bohaviour	Percentage reporting Behaviour as frequently occurring
Talking out of turn	92
Disturbing other pupils	86
Avoiding doing work/delaying starting etc.	70
Moving around/baying desk	70
General 'messing about' while seated	63
Making unnecessary noise	43
Lack of punctuality	25

However, is reported as being likely that having negotiated over such clearly communally enforceable actions as coming late, moving out of one's seat, and not being ready to work that there is a group dynamic at work here that is making everyone aware of their rights and responsibilities in the classroom!

Table (5)
Most disruptive type of behaviour reported by preservice primary school student teachers on Teaching Practice 2, (1996)
(n=49) Figures In percentages

Type of disruptive Behaviour	**Percentage reporting behaviour as frequently occurring**
Talking out of turn	70
Disturbing other pupils	70
Avoiding work	63
Aggression towards other pupils	43
General unruly conduct	0
Impertinence	43
Lack of punctuality	

'Disruption was defined by the students as meaning that the progress of the lesson was disturbed by the event(s) for a significant period.

Again, it is difficult without follow-up interviews to know which effect is dominant increasing confidence as a teacher or the use of specific strategies (mod probably It Is two together) but it is significant that the kinds of behaviour deemed most disruptive have clearly declined. Although the milder irritations of 'talking' and 'disturbing' are still significant, it is the behaviours that have been publicly denied that show the greatest decrease; unruly conduct, work avoidance, and impertinence having all been affected with the latter not being In evidence at all! Clearly an improvement In pupils' classroom behaviour is in evidence In TP2.

Conclusion

It has been the case in Brunei as elsewhere that the main response to disruptive behaviour has been to focus on the individual pupil and Initiate actioto change his or her behaviour, often by physical chastisement or removal from the classroom. There are many good Codes of Conduct written by individual Headteachers and booklets of rules for staffrooms an classrooms which, while making public the expected behaviour of staff and public do not really address the context in which the disruptive behaviour arises; nor do they give much help In ensuring that such misbehaviour is prevented. Since teaching is an intensely personal activity (often conducted closed dove) discussion of such activity relatively rare many schools increasingly as schools move towards a more collaborative culture, teachers are able to share information which can be useful In fostering and maintaining good relationships In the classroom But it is the experience of many student teachers that problems d pupil behaviour are dealt with In isolation with the consequence that the solution to such problems is often sanctions or punishment. However, most of the misbehaviours reported here which are both frequent and major causes of classroom disruption are fairly trivial but very persistent and trying for the student teacher who is trying to teach and deal with one or two disrupters at the same time. Talking out of turn, disturbing other children moving out of seat, and work avoidance are not in the same category of grossness as verbal abuse or violence but they do erode the teachers ability to progress a whole class through a lesson In a fair and effective way - and as it difficult to operate a whole school policy on such mid behaviours there is both a need and the opportunity for the individual teacher to become more responsible for classroom management of behaviour.

One further reason why it must be necessary for each teacher and student teacher to be able to reflect on their classroom experience and to develop strategies that are tailored for that situation is that no two situation can be the same. As Brophy showed in his analysis of teachers who were named by their peers as particularly effective In dealing with potentially disruptive pupils, 'Each case seemed to be unique, and it was not possible to group them to collate information about how to respond to any particular problem-student type' (Brophy and McCaslin, 1992). Thus our student teachers must be allowed to develop the skills of analysis and reflection so that they can adapt their skills to the context they are In, be it at the organisational classroom or individual level, in such a manner can good relationships be established with their classes so that action has been taken before misbehaviour occurs, whether It be through collaboratively developed classroom codes Golden Rubs, or even Individual agreements pupils and teacher if they use dialogue based on mutual respect, will hew realistic expectations of each other.

Finally, while the most frequent and most disruptive behaviours in this study are of a mild nature, this does not mean that they should be ignored. At the same time more work needs to be done on classroom cultures In Brunei to see just what are effective classroom management techniques for shore is a possibility that classroom management techniques developed for Instance, in western classroom settings would be culturally Inappropriate in the Bruneian classroom and could even be counter-productive. At the same time, while this project adopted a preventative approach that involved collaboratively developing with each class a number d agreed rules and the use of positive teaching in classroom management, there is insufficient evidence to suggest that such solutions will prevail without a support administrative system. It true that most administrators clam to wish to increase teachers' capacity to solve their own classroom problems but anecdotal evidence suggests that many educational leaders do not know, or do not seek to know, how to engage reflective activity with their subordinates. A pertinent question for all school systems that are engaged in school improvement is the need to see how classroom strategies whole school strategies are linked, particularly since regent school effectiveness studies argue that most of the variation of achievement among pupils is due 10 classroom variation Thus, it is clear that Headteachers need to have classroom perceiving perspective and equally clear mat teachers need to hew a pupil perceiving perspective. It is hoped that by using techniques that Include pupils in the running of their own environments; the classroom will be more than just a learning place and will be seen for what it an arena of intricate persona interactions which deeply affect the learning and teaching processes .

This study attempts to show that student teachers, who are supported and guided in their efforts, are able to reflect on their teaching practice in a structured way, even In an area as difficult as discipline The accessing of tints reflection to Immediate concrete goals in work related experience such as Teaching Practice helps them to be responsible for this activity since the effort of reflection is Instantly rewarded in the simultaneous performance of the new behaviour In their classrooms. Student teachers do have thoughts and have to make decisions and such developments are the basis of a sound reflective teaching professional .

References

Bauer, Anne M. and Sapona, Regina H. (1991) *Managing Classroom to Facilitate Learning* NewJersey: Prentice Hall

BBC Education (undated) *Teaching Today: the management of pupil behaviour* London: BBC.

Bennett, N. and Cane, C.(1993) *Learning to Teach London: Routledge*

Bernstein B. (1990) 77 The *Structuring of Pedagogic Discourse. Vol. IV.* London: Routledge

Bourdleu.P. and Passeron J. (1990) *Reproduction in Education, Society and Culture.* Berkeley: Sage.

Brophy, J. and McCaslin M. (1902). 'Teachers reports of how they perceive and cope with problem students. Elementary School Journal 93(1): 3-68.

DES (1989). *Discipline in Schools: report of the Committee of Enquiry chaired by Lord Elton.* London; HMSO.

Elliott, J. (1991). *Action Research for Educational Change.* Milton Keynes:Open University Press .

Good, T.L. and Brophy, J.E. *(1987). Looking into C/ Classroom* New York: Harper and Row.

Jones, V.F. and Jones, L S. (1990) *Classroom* Management Boston Alleyn & Bacon

Jones, K ., Quah May Ling and Chartton T. (1996). 'Behaviour which primary and secondary school teachers in Singapore find most troublesome', *Research in Education,* No.55.

McMurray, D.W. (1990). 'An an analysis of the beliefs values and levels *of self confidence of Universiti Brunei Darussalam teacher* education students mimeo:UBD.

Ministry of Education. (1993). *Foreword: Towards Education for All* UBD: Educational Technology Centre.

Pollard, A. and Boume, J. (1994), Teaching *and Learning* in the Primary School. Milton Keynes: Open University Press .

Stoll, L. and Fink, D. (1996). *Changing our Schools.* Buckingham: Open University Press

Sim Wong Kool. (1993). *Pedagogical Studies.* Mimeo: UBD.

Watkins, C. and Wagner, P. (1987). *School Discipline: a whole school approach.* Oxford: Blackwell.

Wheldall, K. and Merrett, F. (1988). Which classroom behaviours *do* primary teachers say they find most troublesome?' *Educational Review 40 (1),* 13-17

Wheldall, K. and Merrett, F. (1989), *Positive Teaching in the Secondary School.* London: Paul Chapman Publishing

Wragg, E.C. (1984). *classroom Teaching Skills.* London: Croom Helm.

Appendix Questionnaire 1: Part A

End of Teaching Practice Project to be handed in by..........
The main purpose of this exercise is to help you know more clearly what you mink about classroom management. It would therefore be useful for you to discuss your thoughts with your teaching colleagues and your friends before you complete the exercise.

Exercise 1
After completing Teaching Practice think about (reflect upon) the management skills you used in classroom and rank them below on the chart according to the 3 most Important, the 3 moderately Important and the 3 least Important management skills. Tick the appropriate box.

Class management skill	**Most**	**Moderato**	**Leas**
Effective lemon beginnings	55	35	10
Appropriateness of tasks	39	37	24
Questions and explanations	37	45	18
Preparation of lessons	35	35	30
Teaching manner and relationships with class	35	29	36
Response to pupils' work and behaviour	33	51	16
Vigilance and awareness of what is going on	27	35	38
Transitions from one activity to another	10	27	63
Effective lesson endings	8	29	63

Please add below any other skills that you found to be important.

Exercise 2

1. Relationships Choose 2 classes with whom you had your most and least satisfactory relationships and write about them below.
   (a) The most satisfactory class I had.
      I. Why do you think thin. went well with this class?
      II. Did you get to know any of the pupils informally?
      III. To what extent did the classroom work (e.g. the lesson topics) help things to do well?
   (b) The least satisfactory class I had
      I. Why do you think thing didn't go so well with this class ?
      II. Can you recall anything that happened that helped make the relationship not so good?
      III. To what extent did the pupils like the work they had to do?
      IV. Did you get to know any of the pupils informally?

2. Your own development

(a) What do you think are the most Important things you have learned during Teaching Practice about managing classes?

(b) What aspect of your classroom management skills do you think you most need to Improve?

3. Using rules

(a) What are your most important classroom rules?

(b) How successful were you in getting your classes to follow them?

Exercise 3

Rewards and Punishments

When you are in the school talk with the Headteacher and other teachers about the use of rewards and punishments In the school . If you have permission from the senior staff try to talk with pupils about their views on rewards and punishments - but only do this if you have permission.

1. Rewards

(a) At the school level: what kinds of behaviour are rewarded? are pupils made monitors or prefects for good behaviour? what public signs of rewards can be seen around the school displays of work, honours boards, newsboards, etc.?

(b) At the classroom level: Make note of the various ways teachers reward pupils. Note the public ones such as work displays but are there any signs of more personal rewards like a smile or words of encouragement, or even non-verbal things like a nod or a gesture or a helping hand, etc.

2. Punishments

(a) At the school level: Is there a school policy on punishment? any documents? Ask your teaching colleagues what is regarded as serious and less serious misbehaviour. Ask teachers what they regard as severe and light punishment.

(b) At the classroom level: in your classroom observation and during the daily 1 life of the school make note of the forms of punishment that you see and if possible ask the teach how they determine the types of punishment they use.

Questionnaire Part :B

1. Frequency

The following are some of the types of pupil behaviour that you may have had to deal with during your classroom teaching. Please indicate with a tick in the box if you have had to deal with any of these types of behaviour at least once a week during your teaching practice.

Type of, pupil behaviour	**(box)**
Aggression towards other pupils	
Aggression to you (the teacher)	
Avoiding work (e.g. not being ready for the lesson, books missing, delaying tactics)	
Disturbing other pupils (e.g. by distracting them from work, interfering with their work)	
Impertinent remarks or replies, cheekiness	
General 'messing about' while seated	
General unruly conduct (e.g. pushing, too rowdy, ill-mannered)	
Lack of punctuality	
Making an unnecessary noise (e.g. scraping chairs or decks, banging objects and moving clumsily)	
Persistently breaking school or class rules (e.g. on dress, pupil behaviour)	
Physical destructiveness (e.g. breaking objects damaging furniture)	
Verbal abuse to other pupils (e.g offensive or insulting remarks)	

2. Most disruptive **(box)**

From the list below please indicate (with a tick in the box) those pupil behaviours that you found most disruptive to classroom teaching and learnig during your teaching practice.

Aggression towards other pupils
Aggression towards you (the teacher)
Avoiding work (e.g. not being ready for the lesson books missing delaying tactics
Disturbing other pupils (e g. by distracting them from work, interfering with their work) impertinent remarks or replies cheekiness
General 'messing about' while seated
General unruly conduct (e.g. pushing, too rowdy, ill mannered)
Lack of punctuality
Making an unnecessary noise (e.g.scraping chairs or desks, banging objects and moving clumsily)
Persistently breaking school or class rules (e.g. on dress, pupil behaviour)
Physical destructiveness (e.g. breaking objects damaging furniture)
Verbal abuse to other pupils (e.g. offensive or insulting remarks)

Table 2: **Most frequent types of disruptive pupil behaviour reported by preservice primary school student teachers' on teaching practice. (n=49). Figures in percentages 'Frequency' means being observed at roast once a week.**

Type of disruptive Behaviour	**Percentage reporting behaviour as Frequently occurring**
Talking out of turn	
Disturbing other pupils	
Avoiding doing work/delaying starting etc	
Moving around/leaving desk	
General 'messing about' while seated	
Making unnecessary noise	
Lack of punctuality	

Table 3: Most disruptive type of behaviour reported by preservice primary school student teachers on teaching practice. (n=49) Figures in percentages,

Most disruptive behaviour	Percentage reporting
Talking out of turn	
Disturbing other pupils	
Avoiding work	
Aggression towards other pupils	
General unruly conduct	
Impertinence	
Lack of punctuality	

'Disruption' was defined by the students as meaning that the progress of the lesson was disturbed by the event (s) for a significant period.

ENHANCING STUDENT LEARNING OUTCOMES: WHAT'S A SCHOOL PRINCIPAL TO DO?

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INTRODUCTION

As the instructional leader of the school, the principal has a responsibility to establish a social and academic environment that will contribute to enhancing student learning outcomes. How is that responsibility defined? What social and academic environments can be managed? Which of these environments require leadership?

The effective schools literature indicates particular beliefs related to enhancing student learning outcomes and the part played by the school administrator. Behaviors such as involving faculty in critical school decisions, involving parents in school programs and activities, and allowing teachers to teach and students to learn with as few distractions as possible have been attributed to school leaders who appear to enhance student learning outcomes.

What other activities does a principal perform which appear to contribute to enhancing student learning outcomes? What does a principal accomplish and how can those accomplishments enhance student learning outcomes?

Literature Review

Hughes and Ubben (1994) describe the five functions and two dimensions of the principalship in a matrix of managerial and leadership behaviors across the areas of curriculum development, instructional improvement, pupil services, financial & facility management and community relations. With such a job description and a list of responsibilities, how does one slice through the matrix with a specific purpose such as enhancing learning outcomes?

What behaviors of a principal that are managerial in nature contribute to the enhancement of student learning outcomes? Likewise, behaviors of a principal that are leadership in nature contribute to the enhancement of student learning outcomes?

According to Heck, Larsen, and Marcoulides as cited in Hart and Bredeson (1996), a predictive model of principal instructional leadership variables influencing student achievement begins with governance which influences both non-instructional and instructional organization and school climate. In turn, instructional organization effects school climate and both directly affect student achievement. At what point do the managerial and leadership responsibilities of the principal influence each of these?

Successful schools and effective schools may not be the same. A school is technically considered effective if the students have shown improvement in basic skills as measured by achievement tests (Sergiovanni, 1995). Although this may be a play on semantics, a school, by this definition, could be effective and still not be a successful school. This is a topic for another paper; however, for the purposes of this paper, the terms "effective" and "successful" will be used interchangeably and will mean basic skills improvement.

Sergiovanni's characteristics of effective schools (1995), in which the term "effective" has been linked to the technical aspect of improved student performance, involves an expansion of the dimensions of the principalship as shown below in Table 1 based on Hughes and Ubben's model (1994, p. 5):

Table (1)
Comparison of Hughes/Ubben and Sergiovanni

	Hughes and Ubben	Segiovanni
1	Curriculum Development	Offer academically rich programs
2	Instructional Improvement	Provide instruction that promotes student learning
3	Pupil Services	Are student centered Have a positive school climate Foster creative problem solving(1)
4	Financial & Facility Management	Have Extensive staff development Practice shared leadership Foster collegial interaction Foster creative problem solving(2)
5	Community Relations	Involve parents and the community

If these are the tasks, how men can the principal implement these goals and objectives? How important are each of these topics? Hart & Bredeson (1996) indicate the need for high expectations, protecting learning time and a belief in students and their learning.

Ubben and Hughes (1997) have pointed out that steps to enhancing student learning outcomes include the following (cross-listed with the Hughes and Ubben (1994) list above):

1. (Curriculum development) Strong emphasis of articulation of curriculum;
2. Instructional Improvement) Schoolwide measurement, studious school environment, support for good methodology; high expectations of students; clear goals for student performance;
3. Pupil Services) Recognition of academic success, orderly environment, positive school climate,
4. (Financial and facility management), [repeating the support for good methodology through staff development and equipment and facilities updating], and
5. (Community Relations) parental support for the education of students.

Survey Development

Based on the foregoing suggestions about what a school principal can do to enhance learning outcomes, a survey form (Appendix A) was developed which contained 19 items and space for one write-in item. The respondents were requested to indicate whether each item was primarily a management behavior or a leadership behavior. Respondents were also requested to categorize each item on a five-point Likert-type scale. This survey was piloted with a group of 30 current school principals, including elementary, middle, and high school principals, from within a single district of 60+ schools. In the pilot survey, 22 administrators responded and several included comments. A number of them requested a copy of the completed research project.

Findings

The top five items based upon principals' indicating a high (5) level of contribution to enhancing student learning outcomes are as follows in descending order:

1. Orderly classroom and school environment (High = 91 %).
2. High expectations for students (High = 86%).
3. Developing parental support (High = 82%).
4. Positive school climate (High = 82%).
5. Clear goals for student performance (High = 82%)

The bottom five items based upon principals' indicating a high level of contribution to enhancing student learning outcomes are as following in descending order (with number 19 as the least important):

15. Articulation of curriculum goals to students High = 36%)
16. Creative problem solving among students (High = 36%)
17. Shared leadership (High = 32%)
18. Schoolwide measurement (High = 27%)
19. Community involvement (in addition to that of parents) (High = 14%)

The top items considered to be leadership:

1. Positive school climate (78%)
2. High expectations for students (78%)
3. Community involvement (71 %)
4. Developing parental support (67%)
5. Recognition of academic success (62%)
6. Creative problem solving among faculty (62%)

The five items considered least to be leadership:

15. Orderly classroom and school environment (51 %)
16. Academically rich programs (50%)
17. Schoolwide measurement (45%)
18. Extensive staff development (38%)
19. Collegial interaction among faculty (20%)

The top five items considered to be management:

1. Extensive staff development (62%)
2. Schoolwide measurement (55%)
3. Academically rich programs (50%)
4. Studious school environment (47%)
5. Articulation of curriculum goals to students (46%)

The five items considered least to be management are:

15. Developing parental support (33%)
16. Community involvement (29%)
17. High expectations for students (22%)
18. Positive school climate (22%)
19. Collegial interaction among faculty (8%)

The top five items that principals voted as being both leadership and management were:

1. Orderly classroom and school environment (59%)
2. Creative solving among faculty (50%)
3. Shared leadership (50%)
4. Studious school environment (46%)
5. Community involvement (in addition to that of parents (45%)

The items that principals voted as being least both leadership and management are:

16. Recognition of academic success (23%)
    Developing parental support (23%)
    Positive school climate 23%)
    High expectations for students (23%)
17. Articulation of curriculum goals to students (18%)
18. Clear goals for student performance (18%)
19. Collegial interaction among faculty (5%)

Summary, Conclusions end Recommendations

It is important to remember that this survey is a pilot survey and results may be somewhat different when replicated on a larger scale. Also in such a study, differences may be indicated between and among high schools, middle schools, and elementary schools and between principals of difference sexes and/or experience.

Clearly, the respondents felt that principals could effectively enhancing student learning outcomes in terms of improving standardized through the following:

Orderly classroom and school environment
High expectations for students
Developing parental support
Positive school climate, and
Clear goals for student performance.

Among the respondents, those items which were least effective in enhancing student learning outcomes in terms of improving standardized test scores were the following:

Articulation of curriculum goals to students
Creative problem solving among students
Shared leadership
Schoolwide measurement, and
Community involvement

Those items thought most important were the Hems that dealt with curriculum Hems closest to the individual student, while the items thought least important were somewhat more removed from students. It is important to avoid taking these items for level of importance at face value. It is entirely possible that the principals thought all Hems were important; the questionnaire did not offer that alternative.

The leadership/management dichotomy must be viewed in relation to the fact that some principals chose to indicate both for an Hem. It is also important to remember that there was no opportunity for principals to indicate that any one item was not important. We must keep in mind that we were asking the respondents to labels these items in relation to their importance in enhancing student outcomes and categorizing school effectiveness based on improved student scores on standardized tests.

An important recommendation is to now move forward a larger study with demographic categories and with possibly some forced-choice questions for the respondents. Only then will we be able to say that one item is definitely superior to another item for our purposes in such a study. What is important, however, is that we realize that all of these items are important for pre-service principals to become knowledgeable of and conversant with in order to plan and develop a well-rounded career, offering the students an optimum place to study and learn.

References

Hart, Ann Weaver, and Bredeson, Paul V. (1996). The Principalship: A Theory of Professional and Practice. New York: McGraw-Hill,Inc.

Hughes, Larry W., and Ubben, Gerald C. (1994). The Elementary Principal's Handbook: A Guide to Effective Action. Fourth Edition. Boston: Allyn & Bacon.

Sergiovanni, Thomas J. (1995). The Principalship: A Reflective Practice Perspective. Third Edition. Boston: Allyn and Bacon.

Ubben, Gerald C. and Larry W. Hughes (1997). The Principal: Creative Leadership for Effective Schools. Third Edition.. Boston: Allyn and Bacon.

APPENDIX A

Survey
on
Enhancing Student Learning Outcomes

Please indicate below your professional opinion (there is no wrong or right answer) as to the following:

A. On the left, check whether each item is management (M) or leadership (L).

B. On the right, indicate the degree to which each item will probably contribute directly to enhancing learning outcomes. Student learning outcomes is defined for this survey to pertain to achievement in basic skills as determined by achievement tests; 5 = very high, 4 = high, 3= moderate, 2= little, 1 = very little

M	**L**		**5**	**4**	**3**	**2**	**1**
		1. Recognition of academic success					
		2. Developing parental Support					
		3. Positive school climate					
		4. Studious school environment					
		5. Shared leadership					
		6. Community involvement					
		7. High expectations for students					
		8. Articulation of curriculum					
		9. Student centered school					
		10. Creative Problem Solving among faculty					
		11. Creative problem solving among students					
		12. Collegial interaction among faculty					
		13. Extensive staff development					
		14. Academically rich programs					
		15. Schoolwide measurement					
		16. Support for good methodology					
		17. Clear goals for student performance					
		18. Orderly environment					
		19. Community involvement (in addition to that of parents)					
		20. Other:________					

Comments:

A PICTORIAL REVIEW OF INSTRUCTIONAL TECHNOLOGY SYSTEMS

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INTRODUCTION

According to Maddux et al (1997, p. 2), there are more computers in the United States than there are people. It is interesting that this growth which has occurred during the 1980's and 1990's took place in the business world and has left the schools lagging far behind. However the ratio of students to computers has dropped from 125 to 1 in 1983 to 20 to 1 in 1991.

The strong support for computers in the educational environment has come only after such use has proven successful in business, government, and the military.

This paper will address the physical components of a microcomputer system such as may be found in a school classroom. These physical components are called hardware and can be a basic computer system or can be connected as an additional piece of equipment. When connected as an additional piece of equipment, the term peripheral is applied. Peripherals generally are of four types of devices: input, output, telecommunication, and musical sound.

Input Devices

With an input device we are able to enter information into the computer. The following are the more popular and the more frequently used input devices:

Mouse: A mouse is a small, palm-sized peripheral that enables us to point, select, and identify objects on the computer screen (Monitor). It has been one of the most often used pointing system and is predicted to be replaced in the future by built-in pointing devices such as touchpads or trackballs.

Keyboard: The keyboard is basically a typewriter keyboard with the addition of special keys called function keys which perform specific computer tasks. The design of the keyboard has progressed to today's user-friendly, ergonomically effective key pad.

Joystick: These are input devices which are attached to the computer by a cord. By moving the joystick, or by pressing its buttons, images on the computer screen can be selected and manipulated. Most children have played computer games utilizing joysticks.

Light Pen: Input to the computer using a light pen is accomplished by simply touching the monitor screen with the tip of the pen.

Scanner: The scanner reads textual and graphical information into the computer. This is accomplished by changing the information into digital format which the computer can recognize and interpret.

Touch screen: By touching the computer screen with your finger, it is possible to input information that the computer recognizes. People with physical disabilities or who cannot use a keyboard are finding this input device to be useful.

Graphics tablet: This is an input device that enables the user to input information that will appear on the monitor. An example of this device can be found in the drafting lab being used by professional draftsmen. Another example may be found being used by TV sportscasters as they trace football plays made by the ball carrier on the field. The display is shown on the TV screen.

Output Devices

Perhaps the most commonly found output device is the monitor. Also called a screen or CRT, monitors take on the appearance of TV screens and can vary from 5 to 50 inches diagonally and may be one-color (monochrome) or full color. Resolution of a monitor is measured in pixels. The higher the number of pixels, the clearer the images will be on the screen. Some computer users believe colors of green or amber monochrome are more relaxing to their eyes than either black and white or full color.

Printers: In order to produce paper output from the computer, a printer is necessary. Printer types vary from daisy wheel, dot matrix, ink jet to laser. Prices of printers, although decreasing dramatically since their first introduction, vary from the inexpensive dot matrix to the much more expensive laser printer. Laser printers produce a whole page at one time, are therefore fast, and produce professional looking text and graphics.

LCD Output devices: In order for the image on the screen of a computer to be enlarged and projected to a wall screen for viewing in the classroom, a liquid crystal display device is used. This device is connected by a cord to the computer and placed on the flat surface of an overhead projector. It is a convenient device in which a presenter shares the computer image with a large audience.

Speakers: Although computers usually come with the ability to produce sound, by adding a sound card called a Musical Instrument Digital Interface (MIDI) and certain software, it is possible to create and control electronic sound which can then be heard by way of speakers. MIDI thus enables the user to compose and play high-quality electronic music.

Storage Devices

Since anything stored in the memory of a computer is lost when you turn the computer off, some means of storing data outside the memory is needed. Our first computers in schools stored data and programs on cassette recorders. This cheap, slow, and usually unreliable storage source has developed into the disk drives of today.

Disk Drives: Disk drives are of two types. The less expensive floppy disk drive reads information from a diskette which must be inserted into the drive. Two sizes of disks are being used at this time; the 5 1/4" and the 3 1/2" disks. The 5 1/4" disk seems to be used to a lesser extent today. The more expensive hard or fixed drive is usually build into the computer and typically has a very large storage capacity. A more recent addition to our hardware list is the compact disk read only memory (CD-ROM) drive which also has a massive storage capacity.

Laser Disk: Another type of storage device is the laser disk. These disks are much larger in size than the CD-ROM disk and are used to store video. A laser disk player and monitor are required when using the laser disk and the system is often connected to a computer to provide interactive computer control.

As the price of CD-ROMs decreases and since they are much less expensive to produce than laser disks, CD-ROMs will more than likely be replacing laser disks in the near future.

Modems

In order to participate in tele-computing a modem is required. This device connects the computer to a telephone line and translates the digital data from the computer into tones that can be transmitted via telephone lines. With the proper software the modem can modulate and de-modulate so that electronic information can be sent back and forth between computers.

With a modem, it is also possible to dial into the world's largest computer network called "Internet." As Marine, Kirkpatrick, Neon, and Ward (1993) suggest, as cited in Maddux, Johnson, and Willis (1997, p.31), "The Internet exists to facilitate the sharing of resources among participating organizations, which include government agencies, educational institutions, and private corporations; to promote collaboration among researchers; and to provide a testbed for new developments in networking."

Conversant Technology

In the realm of conversant technology, both audiotext and voice mail enables us to connect to a computerized operator who interacts either to voice commands or the touch-tone dial. We are then connected to a computerized database which can vary from "Welcome to Smithville High School" to "The weather forecast for Washington, D. C. today is . . . "

The ideas advanced by Pascal, Babbage, Leibnitz and Hollerith, the impetus of World War 11, the invention of the integrated circuit, and finally the microcomputer have provided us with today's modern computer.

We cannot envision what our systems will look like or will be in the future. The Dick Tracy wrist watch TV is old-hat today. It will probably be a computer wrist watch tomorrow.

References

Bitter, G. (1989). Microcomputers in EdToday. Watsonville, CA: Mitchell.

Hacker, Michael and garden, Robert (1993). Living with Technolgoy Albany, New York: York: Publishers, Inc.

Maddux, Cleborne D., Johnson, D. LaMont, and Willis, Jerry W. (1997). Educational Computing Learning with Tomorrow's Technologies. Second Edition. Needham Height, MA: Allyn & Bacon.

Marine, A., Kirkpatrick, S., Neon, V., and Ward, C. (1993). Internet: Getting Started. Englewood Cliffs, NJ: PTR Prentice-Hall.

TEACHER COLLEGE STUDENTS' POSTGRADUATE NEGATIVE CHANGES OF OSTENSIBLY LEARNED EDUCATIONAL OBJECTIVES IN SCIENCE EDUCATION: EROSION OR SIMPLY A SHEDDING OF UNWANTED VALUES.

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The teacher-education literature abounds in studies the findings of which show that general attitudes to education and teaching acquired during pre-service education undergo rapid erosion once graduates become practicing teachers.] most are two-stage studies (before and after graduation) not referring specifically to science education objectives and practices. This study has a three-stage design based on college entrants, graduating and in-service graduates. Respondents' attitudes to seven aspects of science teaching ID the middle school were solicited by means of a 54-item, Likert-type questionnaire and a 23-item, on-the-spot-decision test requiring respondents' reactions to hypothetical but familiar classroom situations. Results of both tests were parallel and clear-cut, with subjects' responses concentrated mainly in the definitely positive or definitely negative positions (according to the philosophy of the curriculum). College entrants exhibited an extremely negative dogmatic. authoritarian, etc.) attitude while graduating students advocated extremely positive (progressive democratic etc.) measures. There was virtually *no* difference between opinions and reactions of in-service teachers and college-entrants - a perfect case of 'return-to-square-one'.

INTRODUCTION

In the literature .eacher-education we find the term 'wash-out effect' *(Reinwasch Effekt* in German) to denote 'the collapse of the missionary ideals formed during teacher-training owing to the hush and rude reality of everyday classroom life' (Veenman 1984). 'It has become commonly accepted within the teacher education community that students become increasingly more progressive or liberal during their stay at the university and then shift to opposing and more traditional views as they move, in-service experience' (Zeicher and Tabachnik 1981). Those authors have adopted the following definitions of 'progressive/liberal' as a humanistic orientation to pupil control, and 'traditional' as custodial and bureaucratic attitudes (Hoy 1968) and say that underlying a 'progressive' orientation is a image of the teacher as thoughtful, imaginative empathic, creative etc., while underlying the 'traditional' orientation is routinized, dogmatic and authoritarian teaching behavior. Corcoran (1981) talks about the gaps between what the beginners know at a theoretical level. and what they actually do at a practical level, and complains that the literature ('a plethora of studies' - Zeichner and Tsbachnik 1981) does not explain why pre-service education fails to survive the shock of transition from university to school. That shock is often termed 'reality-shock', 'transition-shock'. or 'Praxisschock' by various authors. Others talk about 'erosion of attitudes', e.g., Sarsour (1978). The majority of studies on this subject were done with elementary school teachers "d fewer with teachers at the secondary level Studies dealing specifically with science teachers seen to be rare. Of the 83 studies from 1960 onwards identified by Veeman (1984*)* *none* were published in the science education literature and only one title (Dutch) refers explicitly *to* science education. The assumption underlying most of these studies is of course, *that* the 'missionary ideals' allegedly created during pre-service teacher education are indeed real. However, alternative views have been offered. One such view propounds the hypothesis that teacher-socialization is largely completed *before formal* training, and that pre-service education has, at best. a marginal impact (e.g., Lortie (1975) in the U.S. and Petty and Hogben (1979) in. Australia). (1967) talks about the employment of impression by students in their responses to questionnaires and states that students retain the traditional perspectives that they enter with and that once the need for 'impression management' disappears, the progressive perspectives are jettisoned 1 his would mean that the progressive-traditional shift that bad apparently been detected numerous studies is 'not so much a change of attitudes as it is the removal of a veneer that had temporarily been adopted by students in response to what they saw as the prevailing progressive ideology of the college'. In other words: Students respond according to 'what they think that science education is supposed to be like' (Jungwirth and Zakhalka 1987) and then revert to their own point of view. The present authors prefer to entitle this process 'the back-to-square-one phenomenon' - to be illustrated In this paper.

Most of the studies dealing with the 'erosion' of attitudes allegedly acquired in college are two-stage affairs, i.e., they are attempts to ascertain changes of student-teachers' attitudes before and after graduation. The present study has a three-stage design-probing college-entrants views as well. College-entrants' views can be taken to portray their image of the situation in the secondary school. while graduating students' views portray college-expectations. Experienced teachers' expressed attitudes return the observer to the secondary level. Sarsour (1978) who has conducted such a three-stage study of Arab teacher-college students in Israel, defines the home environment of three-quarters of the Israeli Arab population (totaling about half a million, i.e. 18% of the total population of Israel) who live in Villages thus:

> *The society is patriarchal Parent educate their children for obedience and imitation of the adults s good manners and in being traditional Children are not encouraged to be individualistic and independent The social climate, the style of leadership "d the dominant Values of the Arab village are different from hose which guide the training of teachers the teacher college, skier which they are to be (re-)absorbed in their villages.*

He asked the question 'whether the training colleges really change the attitudes of the student-teacher who had been brought up in (such an) authoritarian and patriarchal environment'. His findings were that:

1. training-college students before graduation showed a significantly more progressive, innovative and democratic attitude towards education that college-entrants, and

2. after graduation a process of erosion and regression takes place affecting graduates' 'new' educational attitudes. A tendency to return to the original attitudes was observed.

Sarsour's (1978) study deals with elementary school teachers in general, without differentiating their venous fields of specialization. The present study deals specifically with science teachers at the middle school level (grades 7-9, aged 13-15 years) who obtained their pre-service education at a teacher-college for the Arab sector of the Israeli educational system. It will describe the views about science teaching of college-entrants graduating college-students, and practicing teachers (graduates of the same college) in the field It is thus a cross-sectional not a longitudinal study.

Method

Two tests were constructed to obtain respondents' views on the following seven areas of science teaching in the middle school:

1. Active teacher-involvement in the science lesson.
2. Active pupil-involvement in the science lesson.
3. The characteristics of a science lesson.
4. Textbooks and other sources of information.
5. Teacher-pupil relationships.
6. Evaluation of pupil-achievement (assessment).
7. Aims and objectives of science teaching in the middle school.

It should be pointed out here that the Israeli science curriculum in the middle school comprises biology as well as chemistry/physics in all of its grades (7-9) normally taught by the same teacher. The curriculum at this level as well as at the upper secondary level is strongly enquiry-oriented stressing the development of the appropriate intellectual skills. The science curriculum for Arab schools is the same as for Jewish schools. apart from the oral and printed language of instruction.

The 'reactions' questionnaire

This test contained 23 *items* and was patterned after the on-the-spot-decisions test (Jungwirth and Dreyfus 1974). The introduction to this test reads:

> *In this questionnaire you will find 23 situations of if a kind in which teachers are apt to find themselves fairly often We are interested to see how you would react in these situations. You will realize that in an actual teaching situation teachers have very little time at their disposal for deliberations of am length, and must react more or less spontaneously You are requested therefore, to state your reactions to each of these situations as quickly and concisely as possible.*

Three or four situations pertained to each of the above-mentioned topics. One item per topic will be quoted below, giving the situation and the hoped-for response (or words to that effect).

Sub-test 1-item 14: Some pupils in the 8th grade would like to set up an experiment to test for the influence of temperature on transpiration. What would you say to them? (I would encourage them to follow up their interests and provide help and guidance, if required.)

Sub-test 2-item 2: Pupils in your 9th grade say that they are unable to write the conclusions of an experiment in their note-books because you didn't tell them what the conclusion was to be. What would you say to them? (It is up to you to draw the conclusions from your experiment to be discussed in class later).

Sub-test 3-item 4: A pupil states: There is something in a tomato that keeps it from spoiling. It is 8 fact that once you *cut* it open *it* starts rotting since that substance is destroyed in contact with the air. What would your reaction be? (That's an interesting hypothesis. Can you suggest ways of testing it by experiment?).

Sub-test 4-item 8: A pupil tells you that in his opinion the textbook has attractive pictures, but does not contain all the needed information. What would your response be?

(The textbook is not supposed to be the only source of information. You should try to look also at other sources in the library).

Sub-test 5-item 13: It has come to your notice that in your pupils' opinion you do not encourage questions and sometimes even reject pupil-questions angrily. What would you do? (Discuss the matter with them in a friendly way and arrive at a *modus vivendi* agreeable to all concerned).

Sub-test 6-item 18: A pupil received low marks in an tells you he had *had* high marks since he had memorized all the material. Your reaction? (Explain that learning by heart does not ensure comprehension and it is comprehension that is more important than memorization).

Sub-test 7-item 23: A colleague of your says that it is a waste of time to try to develop critical thinking skills in the middle school because pupils are unable to meet such expectations What would your response be? (Since the development of critical thinking is one of the major aims *of* science education one should *start* as soon as possible, even in the elementary grades)

The test and item validity were secured by agreement with a team of six science education experts. items on which there was no agreement were dropped or reformulated.

Test-reliability (Cronbach's Alpha): 0.79.

Point-bi serial correlation item with sub-test total: mean = 0.61; range: 0.53-0.77.

Point-bi serial correlation item with total test: mean = 0.46; range: 0.22-0.65.

The 'opinions' questionnaire

This test contained 54 Likert-type, 5-option items (ranging from definitely agree to definitely disagree). Half of the items contained positive formulations (which were in accordance with the philosophy of the curriculum); the other half contained negative formulations. One item per sub-test (either positive or negative) will be quoted below.

Sub-test 1 -item 49: The teacher *himself* should analyze and explain the results of an experiment. (-)

Sub-test 2-item 37: The pupils should take an active part in the planning of field-trips (+)

Sub-test 3-item 51: The greatest portion of the science lesson should be devoted to teacher exposition.
(-)

Sub-test 4-item 39: The textbook should NOT include all the answers to questions to be dealt with in the laboratory. (+)

Sub-test 5-item 19: The first thing pupils must learn is to obey the teacher without question. (-)

Sub-test 6-item 6: Assessment criteria should include critical thinking and problem-solving skills. (+)

Sub-test 7-item 7: The main objective of science teaching in the middle school is to have pupil memorize facts. (-)

Test and item validity were obtained, as with the former test, by using a panel of competent judges.

Test reliability (Cronbach's Alpha): 0.96.

Point-bi-serial correlations with sub-test total: mean = 0.85; range: 0.72-0.93.

Point-bi-serial correlation *items* with total test: mean = 0.83; range: 0.68-0.92.

Both tests were administered to:

(a) college entrants (n = 74) as part of their entrance examinations
(b) Graduating students (n = 26) at the end of their third (final) year; and
(c) practicing teachers (n = 30) with 2-10 years of teaching experience

The tests were administered in the Arabic language. The study was executed in 1987-8.

Results

The 'reactions' questionnaire

Respondents' reactions were evaluated according to whether they represented a definitely positive stance (in accordance with the hoped-for model answers) or whether they approximated to such a stance, were indefinite (neutral) approximated to a negative stance, or whether they expressed definitely negative position. Below is a selection of *definitely negative* reactions to illustrate this point:

1. I do not accept pupils' suggestions.
2. *I shall tell* the pupils the expected results of the experiment in advance.
3. I shall ignore what pupils say about me.
4. Everybody uses this textbook - and so will you.
5. I don't care what the pupils say (about my behavior).
6. I'll tell the pupils that the best way to get high marks is to memorize what's in the book and their notes.
7. The science teacher's task is to transmit facts, not to attend to critical thinking

Table 1 summarizes the reactions of the three test-populations. In order to accentuate matters, both positive and both negative response-types have been summed.

Table 1. The 'reaction-test' (rounded percentage)

Sub-test	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**Total reactions**
Response	**a*b*c***	**abc**	**abc**	**abc**	**abc**	**Abc**	**abc**	**abc**
Positive	29 66 29	29 68 26	23 68 29	23 59 28	27 71 28	24 65 25	21 70 27	27 67 37
Neutural	13 11 15	15 14 15	13 8 11	9 13 8	8 6 10	8 6 12	14 2 20	11 8 5
Negative	58 23 55	55 18 59	64 23 60	67 28 64	65 22 62	67 29 62	64 28 52	63 24 58
	100 100 99	99 100 100	99 99 100	99 100 100	100 99 100	99 100 99	99 100 99	101 99 100

Group a= entrants (n=74), group b = graduating students (n=26), group c = teachers (n=30).

Table 2. The ''opinion-test' (rounded percentages)

Sub-test	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**Total reactions**
Response	***a*b*c****	***abc***	***abc***	***abc***	***abc***	***Abc***	***abc***	***abc***
Positive	13 91 16	10 79 20	11 90 15	10 86 13	14 88 20	13 93 17	10 90 19	13 89 17
Neutural	9 1 7	10 10 7	11 7 8	9 12 8	10 7 9	8 2 10	12 3 7	10 5 8
*Negative***	78 7 76	80 9 73	77 2 76	79 1 80	75 4 71	79 6 72	78 7 73	78 6 74
	100 99 99	100 98 100	99 99 99	98 99 101	99 99 100	100 101 99	100 100 99	101 100 99

- ***Group a= Entrants (n=74), group b=graduating students (n=26), group c=teachers (n=30).***
- ***** Scores on items with negative contents were inverted.***

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From table 1 it can be seen that there was a very close similarity between college-entrants and practicing teachers: both *strongly negative* positions, while the graduating students' positions were highly positive.

Significance of differences (t-tests) were:

(a) between entrants and graduating students: all sub-tests and test total in favor of graduating students ($p<0.0001$);

(b) between entrants and teachers: all sub-tests were not significant; total in favor of teachers ($p<0.05$); and

(c) between graduating students and teachers: all sub-tests and total in favor of graduating students ($p<0.0001$)).

Among the entrants females exhibited a somewhat greater degree of conservative reactioon sub-tests 6, males on sub-tests 3 and 5; for all $p<0.05$. There were DO significant differences on the other sub-tests and the test total. In the graduating as well as in the teacher groups there were significant differences at all. The length of experience (2 to 10 years) *was not* found to be a significant factor in teachers' reaction.

The 'options' questionnaire

Table 2 presents the results of all sub-tests and the total. The same pattern of responses as in the reactions questionnaire can easily be seen. Comparing tables I and 2, it can be seen that the differences between entrants and practicing teachers on the one band, and the graduating students on the other, were even more pronounced for the options questionnaire than for the reactions questionnaire.

All differences between entrants and graduating students, and between graduating students and between graduating students and teachers were highly significant ($p<0.0001$), while the differences between entrants and teachers were *non-significant,* except for sub-test 2 (significant at $p<0.05$ in favor of the teachers).

Contrary to what was found in the reactions questionnaire, correlations with years of teaching experience were *all* significant. Correlation coefficients ranged from -0.45 to -5.56, showing that teachers' attitudes tended *to* become more negative as their teaching experience increased.

A t-test comparison of male and female respondents showed no significant differences in the entrants' and the teachers' groups, while in the graduating group there was a slight tendency for females to express more conservative opinions, with the exception of sub tests 2 5 and 7, at $p\leq0.05$. The correlation between individual scores on both tests was $r = 0.68$ ($p<0.01$ I) Sub-tests inter-correlations - within both tests - were very high mostly in the region of 0 80-0.90 indicating that respondents were reacting according to a generalized approach to science teaching. This is discussed below.

Discussion

This study has dealt with middle school, college-trained science teachers' opinions and (hypothetical) reactions to commonly found classroom situations, not with general 'missionary ideals' about education purportedly acquired at college. However the back-to-square-one phenomenon, i.e. reversal of graduating students' positive opinions and reactions once they had become practicing teachers, until they were virtually indistinguishable from college-entrants' opinions and reactions, as regards *every one* Of seven aspects of science teaching, was unequivocal and unmistakable phenomenon will now be detailed according to the tests parallel contents. These contents are, and apparently were also so regarded by respondents, highly interrelated, e.g. respondents' views on desirable teacher-pupil relationships and vs. pupil active in venous various of the lesson; or objectives of science teaching vs. assessment of pupil achievement. Sub-test contents will therefore be summed where applicable.

Active teacher pupil involvement in the science lesson

Here the transition was from - and back to - a completely authoritarian, teacher-directed approach coupled with pupil-passivity and non-involvement in the planning, execution and analysis of classroorn/laboratory/field-work activities Graduating students on the other hand, advocated a guided enquiry approach allowing for pupils' own interests and not only permitting them an active pan in such activities but actually encouraging and demanding independence and analytical behavior.

Teacher-pupil relationships

In a previous study (Jungwirth and Zakhalks 1987) it was found that 'college entrants stressed the desirability of formal/distant relationships while graduating students eschewed them'. In the present study's sampled (both reactions and opinions - sub-test 5) respondents' views paralleled that study [up from 14% to 88% (opinions) and from 27% to 71% (reactions) reverting almost exactly to the previous levels]. Close and friendly relationships between teachers and their pupils is assumed to be a necessary but not sufficient, condition for the successful execution of an enquiry-oriented curriculum. It is not surprising therefore, that sub-tests 1 and 2 show close parallels to subject 5.

Aims, objectives and evaluation of achievement (sub-tests 6 and 7)

The Israeli middle school curriculum in science takes its cues from other enquiry-oriented curricula in Israel and elsewhere, and its objectives as regards higher-order thinking and higher taxonomic levels of achievement are similar. What is to be striven for is 'teaching for intellectual independence i.e. the capacity for making judgments about knowledge claims for oneself, (Munby 1980). Small wonder then, that sub-test scores 6 and 7 of both tests reinforce each other, accepting or rejecting such objectives and their place in pupil assessment.

CONCLUSIONS

This study, being cross-sectional, rests upon the assumption that the trends displayed by the college-entrants', graduating students' and practicing teachers' responses are similar to those that would have been obtained in a longitudinal study. Assuming this, the obtained data are quite disturbing to the science-teacher educator.The fact that subjects' responses were highly polarized, i.e. there were relatively few intermediate/neutral responses so that most of the responses were either highly positive or highly negative, makes the picture even clearer. The fact that the college entrants came from 12 different schools and the practicing teachers from 21 different schools, gives additional meaning to the reported uniformity of the data. Furthermore, females' and males' (roughly 50% each in each sample) reactions and opinions were virtually the same - providing unanimity across schools and across genders.

The data obtained do not, by themselves, provide evidence for or against either of the two possible scenarios (wash-out effect vs. veneer-removal) mentioned in the introduction. In either case, implications for the science teacher educator are extremely serious. The data do not leave much to one's imagination. Whatever the reason it is back to square one!

References

CORCORAN. E. 1981, Transition the the beginning teacher's paradox. *Journal of Teacher* Vol. 32, No. 3 pp. 19-23.

Hoy, W. 1968, The influence of experience on the beginning teacher *School Review,* Vol. 76, pp. 312-323.

Jungwirth E. and Dreyfus, A. 1974 Biology-teachers' on-the-spot decisions (some problems in pre-service teacher-education). *Science Education* Vol. 58, No 2, pp. 205-213.

Jungwirth E and Zakhalka M. 1987 Teacher-college students' opinions in Israel and on the West

Bank of what science-education is supposed to be'. *International Journal of, Science Education Vol.* 9, No. 2, pp. 247-257.

Lortie. D. C. 1975, *Schoolteacher (University* of Chicago Press, Chicago).

Munby, H 1980, Analyzing for Intellectual independence In H. Mundy, G. Orpwood and T.Russel *(eds.) Seeing Curriculum in a New Light* (1 he *Ontario* Institute for Studies in Education Toronto).

Petty, M. and Hogben, D. 1979, *Explorations of semantic space with beginning teacher: a study of socialization into ideology or social mission. A* paper presented at the annual meeting of AERA San Francisco.

Sarsour. S 1978, Stability and erosion of A rob Teachers' professional attitudes before and during teaching. Unpublished Ph.D. thesis, The Hebrew University of Jerusalem, Israel.

Shipman M. 1967, Theory and practice in the education of teachers, *Educational Research* Vol. 9 pp. 208-2 1 2.

Veeman, S. 1984, Perceived problems of beginning teachers. *Review of Educational Research, Vol.* 54 No. 2, pp. 143-178.

Zeichner K.M., and Tabachnik, B.R. 1981, Are the effects of university teacher education 'washed out' by school experience? *Journal of Teacher Education* Vol. 32, No. 3, pp. 7-11.

Index of Authors

Last Name	First	Page #
A		
Abd El-Baki	Moustafa	133
Ahlawat	Kapur	143
Al -Dajeh	Hisham	143
Al-Ghrair	Ahmad N.	165
Al - Hajeid	Mohammad Rajab	169
Al Hammouri	Hind	201
Al - Qudah	Qassem	189
Al Weher	Mohamoud	201
Ali	Wan Zah Wan	279
B		
Black	Shlomo	337
Bohac-Clarke	Veronika	211
Brown	Carolyn H.	227
C		
Choate	Jean Marie	239
Churchill	Elizabeth	211
E		
Elias	Habibah	279
El-Hassan bin Tala	His Royal Highness Crown Prince	15
G		
Gayles-Felton	Anne	245
Goodyear-Stevenson	Linda	269
H		
HaShahar	Ayelet	379
Heyneman	Stephen P.	87
I		
Isa	Abd. Majid Mohd.	279
J		
Jarchow	Elaine	27

BEST COPY AVAILABLE

K		
Kasa	Zakaria	279
Klassen	Sandra J.	Xvii
L		
Levine	Tamar	287
M		
Mahyaddin	Rahil	279
Maia	Nelly Aleotti	xix / 7
Malone	Violet	309
Mau	Rosalind Inn Pung	315
McGettrick	Bartholomew	43
Mor'ison	Steven J.	325
Munk	Miri	337
N		
Nevo	Yael	287
Nor	Sharifah MD	349
Nsour	Abdullah	3
Nwachuku	Uchenna	363
O		
Osguthorpe	Russell T.	43
P		
Patel	Purushomdas G.	371
Patterson	Robert S.	43
Pihie	Zaidatol Akmaliah Lope	279
S		
Sabar	Naama	379
Sim	Wong-Kooi	63
T		
Taha	Hajah Zaitun binti	395
Tedesco	Juan Carlos	119
Tomlinson	Louise M.	403
W		
Wallace	Helen James	269
Welsh	Jim	419
Wentz	Charles	441
Wentz	Patricia	335
Wong	Jessie	315
Z		
Zahalka	Mahmoud	445

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The Hashemite Kingdom of Jordan

THE NATIONAL COMMITTEE
FOR THE 43rd WORLD ASSEMBLY

TEACHER EDUCATION AND SCHOOL REFORM

ICET

INTERNATIONAL YEARBOOK ON TEACHER EDUCATION

1996 Proceedings
Vol. (II)

International Council on Education for Teaching
43 World Assembly Proceedings
Amman, Hashemite Kingdom of Jordan

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TEACHER EDUCATION AND SCHOOL REFORM

International Yearbook on Teacher Education 1996

Proceedings Vol. II

**Opening Ceremony Presentations,
Keynote Frank H. Klassen Lecture,
Plenary Session Address and Concurrent Session Papers**

From the

**Forty-Third World Assembly of
The International Council on Education for Teaching**

(Including the final World Assembly report and recommendations
Submitted by ICET to UNESCO)

INTERNATIONAL COUNCIL ON EDUCATION FOR TEACHING

The International Council on Education for Teaching (ICET) is an international association of educational organizations, institutions, and individuals dedicated to the improvement of teacher education and all forms of education and training related to national development.

ICET incorporated in the United States as a non-government organization (NGO), and has official operational relations with UNESCO. Membership in ICET is open to individuals, colleges, universes, government agencies, and private sector organizations that are engaged in educational and training activities.

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ICET conducts an annual World Assembly as a forum for the worldwide educational community on matters related to national development and teacher education, and publishes a volume of proceedings, the International Yearbook Teacher Education.

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TABLE OF CONTENTS

Acknowledgements: Sandra J. Klassen xiii

Preface: Nelly Aleotti Maia xv

Introduction: Victor Billeh and Kamal Dawani xvii

Messages from:
H.R.H. Crown Prince
El Hassan bin Talal xix
President Nelly Aleotti Maia
Executive Director
Sandra J. Klassen xxi

CONCURRENT SESSION PAPERS *(Continued from Vol. I)*

TOPIC TWO: Fostering Partnerships in School Reform

The Effect of Educational Sciences: Faculty Program on the Effectiveness of In-Service Teachers
Mohammad Abu Alia (Jordan)
Mustafa Sabri (Jordan) 3

Utilization of Instructional Technology Services by Faculty Members at Sultan Qaboos University
Majed Abu-Jaber (Jordan)
Mohamad Eltahir Osman (Oman) 13

School-Based Master's Programs: Reform from within the system
Mary S. Bowser (USA)
RichardG. Creascy (USA)
Karen T. Huff (USA)
Catherine Tisinger (USA) 21

The Role of Higher Education in Fostering Lifelong Learning Partnerships with Teachers
Christopher Day (United Kingdom) 31

The Partnership between Chapman University-Coachella Campus and the Coachella Valley Unified School District: A lesson in School Reform, Resource Allocation and Ethics
Judy Doktor (USA) 45

Partnership Between Primary, Secondary and University Teacher and Literate and Non-Literate Partents in Curriculum Development
Aliu Babatunde Fafunwa (Nigeria) 51

A Faculty Development Program For Piloting A New Mathematics, Science and Technology Curriculum
Ewaugh Finney Fields (USA)
Richard E. Woodring (USA) 65

Teachers and Students-Strategies of Action and Influence in Educational *Institutions in Rio de Janeiro*
Edson A. de Souza Filho (Brazil) 73

The Cooperative School Project at Kaye College, Beer-Sheva: A Story of Partnership and Professional Growth
Ariela Gidron (Israel) 85

Children's Literature-Fantasy that Builds Reality
Maria Lucia Fernandes Guelfi (Brazil) 93

Teacher Perception on Status of Vocational Agricultural Education in Malaysia
Ramlah Hamzah (Malaysia) 99

The Process of Changing the Administrative Culture
Nora Nelson Hutto (USA) 105

Partnership between Universities and Schools as an Introduction to School Reform
Fawaz Jaradat (Jordan)
Suad Ayoub (Jordan) 109

Partnership for Education Staff Development: Joint Training Program at the American University in Cairo
Yvonne Kerek (Egypt) 117

Fostering Partnership between the Hong Kong Institute of Education and Primary Schools in Hong Kong: A Study of the Cooperating Teacher Scheme in the Practicum of the New Course
Law Sin Yee Angelina (Hong Kong)
Fu Yin Wah Priscilla (Hong Kong)
Tung Hok Ping (Hong Kong)
Sze Sin Heng Celine (Hong Kong) 125

Professional Traits Needed for Career Success: How it Relates to the Education of Future Workers
Zaidatol Akmaliah Lope Pihie (Malaysia)
Zakaria Kasa (Malaysia) 137

A New Approach Towards Effective School-Based Teacher Development
Maha Qur'an (West Bank)
Tafeeda Jarbawi (West Bank) 145

Managing Change A School Technology initiative
Jean Russell-Gebebett (United Kingdom) 153

Practice Teaching in Teacher Education
Egidio F. Schmitz (Brazil) 165

Insights Derived From Pre-Service Student Teachers' Evaluation of an Early Field Experience and a Supported Teaching Practice Programme
Sylvia Tang Yee Fang (Hong Kong) 173

TOPIC THREE: Preparing Teachers for School Reform

The Impact of Global Education on Developing Teacher Trends towards World Civilization
Mustafa Abu Ashaikh (Jordan)
Sawsan Tamimi (Jordan) 189

Graphing Calculators: Teacher Perception, Training, and Attitude
Khaled Abuloum (Jordan) 201

The Effectiveness of Acquisition of Teaching Competencies in the Program of Practical Education Among the Teacher Students in the University of Jordan
Khaled Abuloum (Jordan)
Mahmoud Al Ghazawi (Jordan) 221

Teacher's Views of Assessment Practices
Leah D. Adams (USA) 235

The Role of Teacher Certification Programmes in School Performance
Samar Aghbar (Jordan)
Monther Shboul (Jordan) 241

The Impact of Pre-Service Teacher Education Program at the University of Jordan on Perdagogical Thinking of its Students
Omar El-Sheikh (Jordan)
Amin Al-Kukhunn (Jordan)
Hamzah Al-Omari (Jordan)
Naseer Al-Khawalden (Jordan)
Rateb Ashour (Jordan)
Abdel Karem Al-Haddad (Jordan)
Ghazi Oudeh (Jordan) 257

New Roles of Jordan Teachers in School Reform
Ahmad Al-Kateeb (Jordan)
Mousa Alnabhan (Jordan) 271

Assessment of the Program for Preparing Islamic Education Teachers in Jordanian Public Universities
Naseer Al-Khawaldeh (Jordan) 287

Are Nigerian Teachers Ready for School Reform? An Empirical Investigation
Tony Aladejana (Nigeria) 299

Fafunwa's Contributions to Teacher Education Reforms in Nigeria
Tony Aladejana (Nigeria)
Kayode Alao (Nigeria) 305

A Study of Induction Year Program For Beginning Teachers in Jordan
Moh'd Kamal Yousef Alyah (Jordan) 313

The Role of Teacher in the Community School
Mohammad Ashour (Jordan)
Radah Al-Khateeb (Jordan) 331

Teachers' Professional Development: A Re-Examination in an Era of Reform
Salem Aweiss (Palestine) 347

Literacy in Conflict: Ethnicity or Nationalism?
Charles T. Barber (USA) 363

Teaccher Education and School Refrom: Acase Study from Jordan
Victor Billeh (Jordan)
Munther Masri (Jordan) 371

The Use of Reflective Practice and Personal Narratives in the Professional Development of Teachers
Darrell A. Bloom (USA) 379

Drama Education in School: A Must for the Teachers Education
Litwin Cheng Chun Chor (Hong Kong) 385

How Can Teachers Activate Students' Cognitive Strategies by Using Adjunct Questions? A Prescriptive Instructional Model for Improving Teaching and Learning
Afnan N. Darwazeh (Palestine) 395

Enhancing Teachers' Performance Through Practicing The Instructional Designer Competencies
Afnan N. Darwazeh (Palestine) 413

455

A Specification for an Information Systemic Data-Structure to Define and Quantify Ethic in Course Design: A Computer-Integrated Quality-Based Approach to Enhance Teacher Education and School Reform
Saljalendu Dey (USA) 421

The Practical Education Programme at the University of Jordan: A Look from within
Turki Ahmad Ali Diab (Jordan) 429

Preparing Teachers for School Reform: Case Study of One Teacher Education Program
John R. Freese (USA) 439

Drama and the Infusion of Multiethnic Content: An Exploratory Study
Lorenzo Garcia (USA) 445

UNESCO'S Teacher Education Resource Pack: A Means for School Reform Through School-Based Staff Development
Hala T. Ibrahim (Jordan)
Zuhair Zakaria (Jordan) 455

The Thirty Settlement Project
Anat Kainan (Israel) 467

Preparing Teachers for School Reform
Ivete Manetzeder Keil (Brazil) 479

Programmes and Practices Related To: Innovations in Pre-Service and In-Service Teacher Education and Their Likely Impact on Schools; the Role of Commitment; Empowerment and Reflection; the Role Assessment and Student Support
Daniel Kiggundu-Mukasa (Uganda) 483

Reinforcing New Visions for the College of Education in Jordan to Foster School Reform
Fakhri R. Khader (Jordan) 497

What Special About Providing Inservice Courses for Teacher Training: When Technical and Commercial Personnel Become Teachers
John Lam Tak Shing (Hong Kong)
Cheuk Fai Leung (Hong Kong)
Joe Wai Shing Li (Hong Kong)
Flora Wai Ming Yu (Hong Kong) 509

Student Teachers' Views of Concept Mapping as a Means to Enhance Collaborative Learning in Science Classrooms
Atputhasam Lourdusamy (Brunei) 523

Culture Bias and Insensitivity: What Role does it play in Cross-Cultural Teaching?
Phipip E. Lyon (Hong Kong) 539

Dealing with International Demand for Teachers: The Effectiveness of Varying Preparation Programs
John W. Miller (USA)
Michael C. Mckenna (USA) 549

Preparing Teachers to Restructure Schools in Botswana
Albert Reitseng Mothibi (Botswana) 567

The Effect of Training Programs for Laboratories Personnel on Their Performance
Ahmad J. Obaid (Jordan) 583

Classifying Teachers in Ranks as a base to Professionalize Teaching
Zougan Obiedat (Jordan)
Souhaila Abu El-Sameed (Jordan) 589

Reform of Matriculation Exams in Israel-Interaction between the Teaching/Learning Process and Assessment
Shmaryahu Rozner (Israel)
Michael Moore (Israel) 597

Applying the Pedagogical Cybernetic (Support for the Training of Instructional Personnel)
Yolanda Sandoval Sanchez (Mexico) 613

Training Teachers for Bilingual Children
Helga Schwenk (Turkey) 621

Preparing Teachers for School Reform: UNRWA Experience
Moh'd Shahin (Jordan) 633

Alternative Assessment and Successful School Reform: Power, Participation, and Equity
C. Joye Smith (USA) 641

Improving Primary School Teachers Quality Through Distance Learning System: (Indonesian Experience)
Mohamad Surya (Indonesia) 657

Teacher Education and the Liberal Arts: A Case Study of the Department of Education at the University of Richmond
Elaine Traynelis-Yurek (USA)
Christopher F. Roelike (USA)
Patricia Stohr-Hunt (USA) 663

TOPIC FOUR: Capitalizing on International Collaboration for School Reform

Consortium: An Effective Instrument for Fostering Partnership in School Reform
Crispiniano R. Acosta, Sr. (Philippines) 681

Burnout and Coping Among Palestinian Teachers
Taisir Abdallah (Israel) 691

CITI - A Virtual Center for Innovation and Creative Thinking Implementation in the Middle East
Edna Aphek (Israel)
David Yellin (Israel) 701

Research Role In Teacher Formation: Critical Consciousness And Social Responsibility
Maria Augusta Salin Goncalves (Brazil)
Rute Vivian Angelo Baquero (Brazil) 707

Artistic Appreciation and Expression, Curricular Proposal for Preparing Teachers into Pre-Schooler Education
Bertha EGarcia Gonzalez (Mexico)
Ganett Saleh Gattas (Mexico)
Jeanette Martinez Saleh (Mexico)
Blanca Delia Garcia Gonzalez (Mexico) 711

Moving From Isolation Through Cross-Cultural Partnership and Linkages in Teacher Education in Southern Africa: Experience from the University of North-West, South Africa
Hassan Omari Kaya (South Africa)
Phineas Mabetoa (South Africa) 723

Nationalism and Globalization in Teacher Education
Ali A. Mosa (Saudi Arabia) 729

Declining Male Enrollment in Schools: The Boy-Child Problem
Alice N. Ndu (Nigeria) 739

PART V: FINAL WORLD ASSEMLBY REPORT AND RECOMMENDATIONS SUBMITTED BY ICET TO UNESCO

A Comparison of the Recommendations from Two Conference:

Teacher Education and School Reform:
The 1996 ICET World Assembly
Amman, Hashemite Kingdom of Jordan
December 16-21

And

Strengthening the Role of Teachers in a Changing World:
UNESCO's International Bureau of Education
1996 International Conference on Education
Geneva, Switzerland 749

INDEX OF AUTHORS 779

459

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ICET is most grateful to His Majesty King Hussein for bestowing the high honor of his patronage. ICET also wishes to extend its profound appreciation and warmest gratitude to His Royal Highness Crown Prince El-Hassan who presided as Chairman of the World Assembly and inspired World Assembly participants with his exceptional Intellectual insights as the *Keynote Frank H. Klassen Lecturer.*

ICET appreciates H.E Dr. Abdullah Nsour for his extraordinarily effective leadership as well as our hosts: The Ministry of Higher Education, The Ministry of Education, The National Center for Human Resources Development, and the Jordanian Public Universities, for their sponsorship and generous contributions of time, effort and goodwill in the planning and production of the 1996 World Assembly.

ICET extends a special thanks for the exceptional work accomplished to prepare for publication of the 1996 *International Yearbook on Teacher* Education. This volume would not have been possible without Dr. Victor Billeh, the outstanding professional staff at the National Center for Human Resources Development, Dr. Ahmad Majdoubeh, Mr. Yousef Awad and the University of Jordan Students.

Finally, special thanks are extended to Dr. Nelly Aleotti Maia who presided as ICET President over the 1996 World Assembly and to ICET staff member Kristy Berry, for her personal dedication and professional contributions.

Sandra J. Klassen
Executive Director

PREFACE

The International Yearbook on Teacher Education is a source of global expertise. It provides the reader with a review of current research and innovative programs and practices viewed from an international perspective and offered to improve the quality of teacher education worldwide. The papers and recommendations selected for publication in this 1996 volume are the product of the 43rd ICET World Assembly, hosted by The Jordanian Ministry of Higher Education, The Jordanian Ministry of Education, The National Center for Human Resources Development, and the Jordanian Public Universities under the patronage of His Majesty, King Hussein bin Talal.

To develop this volume, ICET invited eminent educators from Africa; Asia and the Pacific; Europe; the Middle East; South America; Central America and the Caribbean to address the World Assembly Theme: *Teacher Education and School Reform.* The Theme recognized that improving the quality of education is every nation's best development strategy and that improving the quality preparation of a nation's teachers through continuous reform of educational institutions and basic and secondary education policies and curricula is the best pain and the best process to achieve educational excellence and national prosperity.

The World Assembly Theme was supported by plenary sessions and researched-based paper presentations focusing on four Topics:

Topic One

Enhancing Values in School Reform to promote democratic values and practices; develop a democratic pedagogy of school renewal; build a school community; orient school personnel towards planned change; and enhance teaching and learning effectiveness.

Topic Two

Fostering Partnerships in School Reform between schools and universities; within professional development schools; between professional and public schools; and between centers of educational development and public schools.

Topic Three

Preparing Teachers for School Reform through innovations in pre-service teacher education and their likely impact on schools; the role of commitment, empowerment and reflection; and the role of assessment and student support.

Topic Four

Capitalizing of International Collaboration for School Reform by identifying national, regional and international efforts for achieving school reform; and enhancing

international networking and collaborative research and development strategies for systemic reform.
Education leaders from Jordan, the United States, the United Kingdom, Switzerland, and Brunei Darussalam were invited as World Assembly keynote and plenary speakers. Their research and analysis comprise PART I, II, and III of this volume.

In PART IV, academic papers are organized by one of the four topics they address.

PART V of this volume includes the World Assembly Communiqué, a synthesis of the salient ideas, issues and policy recommendations presented and deliberated at the 1996 World Assembly.

This volume outlines key issues confronting educators and suggests successful strategies and practices for educators to model in pursuit of quality teacher education and school reform on the local , national, and international level.

Nelly Aleotti Maia
1996 ICET President

INTRODUCTION

The 43^{rd} ICET World Assembly was held in Amman, Jordan, December 16-21, 1996 under the patronage of His Majesty King Hussein bin Talal. His Royal Highness Crown Prince El-Hasan bin Talal has presided as World Assembly Chairman and delivered the Keynote Frank H. Klassen lecture. The Assembly was hosted by the Ministry of Higher Education and the Ministry of Education, as well as Jordanian Public Universities, and the National Center for Human Resources Development.

Participants in the Assembly, who come from 46 countries, were scholars, practitioners, and administrators from universities, colleges, departments, and institutes of education, as well as government agencies and professional organizations.

The 1996 World Assembly theme titled "Teacher Education and School Reform" has addressed a major problem that confronts many school systems on the national, regional, and international levels.

Within the framework of the theme, four topics have been focused on by the plenary and concurrent sessions of the conference. The four topics were as follows:

1. Enhancing Values in School Reform.
2. Fostering Partnerships in School Reform.
3. Preparing Teachers for School Reform.
4. Capitalizing on International Collaboration for school Reform.

Those submitting papers for concurrent sessions were requested to write about research studies and programs addressing one of these topics. Over one hundred papers were presented and discussed in the concurrent sessions. Rapporteurs of all sessions were requested to take notes and conclude all papers presented in the sessions for the purpose of writing the final World Assembly report and recommendations.

Professor Victor Billeh
Professor Kamal Dawani

MESSAGE OF WELCOME

We in the Hashemite Kingdom of Jordan have always prioritized human resource development. Though our country is rich in heritage, geographically central and a good example of political moderation, stability and democratization, its natural and material resources are somewhat limited. This is why, for decades, we have invested in and developed to the best of our ability the skills of our Jordanian citizens.

We believe our educational system can prepare and qualify our young people to serve, participate and contribute in the best way they can. We take pride in this system which, from the start, has been dynamic, progressive and reliable.

However, we are always open to new ideas, and we therefore welcome with great enthusiasm the convening of the 43rd World Assembly of the International Council on Education for Teaching (ICET) in Jordan.

Since the dawn of human civilization, teachers have been the carriers of the torch of knowledge, freedom and welfare of mankind. Schools are the site of most of our formative experiences. We must do all we can to empower teachers and bring about the necessary reforms to make the school environment more congenial to learning.

We therefore look forward to hearing education officials, scholars and teachers debate their views on the ever crucial, though somewhat elusive, question of teacher education and school reform. We welcome your fresh perspectives and we hope the various debates will translate into concrete suggestions which all countries can implement and benefit from.

Thanks to conferences like these, humanity is getting a lot closer to the objective of high quality education for all. We feel privileged and honored to host this important assembly and we are confident that the views which will be exchanged in Amman will make a difference.

We welcome all the participants from the region and beyond to Jordan and wish you success in your noble endeavor.

El Hassan bin Talal
Crown Prince of the Hashemite Kingdom of Jordan
December 1996.

MESSAGE OF WELCOME

On behalf of the Board of Directors and Trustees of the International Council on Education for Teaching (ICET), we welcome you and commend your participation at this pivotal 43rd World Assembly, convening in Amman, Hashemite Kingdom of Jordan, December 16-21, 1996.

The 1996 World Assembly theme recognizes that improving the quality of education is every nation's best development strategy and that improving the quality preparation of a nation's teachers through continuous reform of educational institutions and basic and secondary education policies and curricula is the best plan and the best process to achieve educational excellence and national prosperity.

It is auspicious that Jordan's visionary leaders have invited ICET to convene this historical forum to crystallize a ten-year government program, launched in 1987, to systemically reform the quality of education. The Hashemite Kingdom of Jordan is distinguished by its traditional policy emphasis on education for development.

Through His Majesty King Hussein bin Talal's great wisdom, unique leadership and personal dedication to education, participation in education and literacy rates in the Hashemite Kingdom of Jordan are among the highest, and the Jordanian teacher is among the very finest in the region.

The World Assembly Chariman, His Royal Highness Crown Prince El-Hassan bin Talal, has contributed tirelessly to the cause of education. As an exceptional educator and intellectual, His Royal Highness has designed and implemented school projects of outstanding and far-reaching impact on educational excellence in the Hashemite Kingdom of Jordan.

And you, the World's leading education practitioners, scholars, administrators, and policymakers, are the global instruments of reform.

ICET welcomes and pays tribute to this exercise in international partnership.

Together you will examine and discuss national and international research, programs, and strategies which enable teacher education and schools to respond effectively to development needs. This World Assembly provides the opportunity for you to share ideas of innovative practices and successful programs in an atmosphere of mutual benefit and cooperation.

To enlist the resources of the world's education leaders in an ongoing partnership to raise educational quality, ICET is establishing at this World Assembly, a *Consortium for International Cooperation on Teacher Education Policy* whose mission is to:

1. Plan a World Education Policy Forum for the deliberation of policy issues, trends, and innovations in teacher education to be convened annually at the ICET World Assembly; and to

2. Develop International Standards of Excellence for the preparation of teachers.

Your collaborative input to educational reform is the best plan to achieve global educational excellence and prosperity.

Nelly Aleotti Maia
ICET President

Sandra J. Klassen
ICET Executive Director

December 1996

Topic Two

Fostering Partnership in School Reform

THE EFFECT OF ESF PROGRAM ON THE EFFECTIVENESS OF IN - SERVICE TEACHERS

Dr. Mohammad M. Abu Alia **and** *Mustafa Sabri E S F*[**]
Hashemite University[*]
Jordan

INTRODUCTION

Large and successive increases in the numbers of students, teachers' schools, and budgets of education have taken place through the incentive and serious efforts of the government to develop the human resources. As a result of these efforts the students formed 33% of the whole populationm (Jaradat, 1992) the teachers form an army of about 48000 or more. The ratio of those who are joining basic education is over than 90% of those who are in the age of education, illiteracy decreased to less than 20%, and the budgets of education increase annually.

Since the seventies or before, the government realized the importance of developing the quality of education in all aspects especially the quality of teachers, schools, supervisors, curriculum, and educational technology.

The urgent social and official interest in educational development led to the first educational development conference which was held in Amman in September 1987. The conference of educational development stressed the importance of its goals and clarified the high level of its strategy of development and variation. It was natural to consider teachers' certification as the most important aspect of the program of educational development.

The general plan of educational development which was introduced by the Ministry of Education on 1989-1998 concentrated on certifying the teachers of diploma holders to become B.A or B.S. To achieve that, the Ministry of Education established a special college for certifying teachers.

Serious cooperation with the official universities started for certifying about 1000 teachers every year. Since the operation of development is global, the private schools began a parallel program for certifying their staff. The UNRWA, for instance, established a university college called The Educational Science Faculty (ESF), for certifying teachers who hold diploma, who were about 2401 forming more than 50% of the total number of UNRWA teaching staff.

Educational Science Faculty (ESF)

The Educational Science Faculty awards a B.A degree in education. It aims at preparing and certifying teachers. It was established by the UNRWA and it is under its supervision administratively and technically. It is located on the campus of Amman Training Center and it is devoted for the Palestinian refugees.

Objectives of the Faculty

The faculty began its programs by the beginning of the academic year 1993/1994 aiming at preparing vocationally and academically highly qualified teachers to work in the basic education stage in UNRWA schools by certifying the students to be awarded the B.A degree in response to the law of education No. 28/1988, and also in response to the educational development plan in the Hashemite Kingdom of Jordan. It also aims at preparing and highly certifying the prospective teachers.

---

[*] Assistant professor in Educational Psychology
[**] Lecturer in ESF/UNRWA

To achieve the two previous objectives the Faculty tried to do the following:

1. Making university education in teaching available for UNRWA schools with special attention given to quality.
2. Providing suitable development chances for in-service teachers in UNRWA schools.
3. Conducting and motivating educational research.
4. Encouraging and developing scientific attitudes and self-independence in thinking scientific analysis and personal initiative.
5. Serving the local community specially the Palestinians
6. Enforcing the cultural identity of the Arab Palestinians
7. Strengthening the educational ties at the local, Arabic and international levels.

The Programs of ESF

There are two programs:
First: Class Room Teacher.

This program is designed for the pre-service and in-service students. The student of the pre-service program has to successfully complete 132 credit hours divided into two major parts:

Faculty requirements: 21 credit hours
Specialization requirements: 111 credit hours
The specialization requirements are divided into
Academic requirements: 42 credit hours
Educational requirements: 69 credit hours

The student of in-service classroom teachers has to successfully complete 84 credit hours, only, because the Ministry of Higher Education in Jordan accepts 48 credit hours for the diploma program. The plan of 84 credit hours is divided into:
Faculty requirements: 6 credit hours
Specialization requirements: 78 credit hours
The specialization credit hours are divided into:
Academic requirements: 37 credit hours
Second: Field Teacher Program- Arabic language.
Educational requirements: 41 credit hours

This program is designed for the in-service students only. The students in the field teacher program have to successfully complete 84 credit hours, only, because the Ministry of Higher Education in Jordan accepts 48 credit hours from the diploma program. The plan of 84 credit hours is divided as follows:
Educational requirements: 27 credit hours
Academic requirements: 57 credit hours.

Background

A few studies have been conducted on the effectiveness of log-term in-service teacher education program. The majority of these studies focused on the short-term in-service teacher education program. For example, Mechler et al., (1985) compared between elementary school teachers who participated in in-service training program, which consisted of interpretation of information at the individual level and classroom climate. And the teachers in control group who received in-service training in the traditional topics only. Statistical analysis of the data on both groups indicated significant differences.

Teachers who participated in experimental group prepared significantly better instructional and remedial plans than those who did not did. Students who were taught by the experimental group of teachers achieved significantly greater gains in reading and mathematics than similar students whose teachers participated in control group did.

Marzano, -Robert.J. & Et al. (1984) studied over a one year period, ten kindergarten through fourth grade teachers from two small rural elementary schools received twenty days of training in the theory and implementation of eight school effectiveness variables.

Ethnographic observational techniques conducted before and after training established that some positive changes occurred in school climate, and that teacher used less time than they had used previously in managerial activities and more time explaining the goals for lessons and activities.

Teachers also used more managerial and motivational techniques. Student had less allocated time for reading and math but that they were more engaged and more successful in class work. A decrease in math and reading achievement was indicated on standardized tests.

Liu, Chin - Tang (1993) studied the effect of Iowa Chantanqua in-service Program on: (1) teacher perceptions, (2) teacher behavior, and (3) changes in student growth as a result of the pre-test/post-test format was used to measure changes in teachers, including teaching confidence, understanding of nature of science, and various perspectives on teaching science. A similar format was used to assess student learning in six domains (concept, application, process, creativity, attitude, and worldview of science end student perceptions of science careers).

The results permit the following statements concerning the effect of Chantanqua in-service program: (1) teachers improve their confidence to teach science in grades 4-9, (2) teachers increase their understanding of nature science significantly as a result of participation in the program (3) teachers develop more positive perceptions of teaching science as a result of participating in the Iowa Chantanqua in-service program. (4) Students learn more science concepts and process skills, can apply more science concepts and principles in new situations, develop more science creativity skills, develop more positive attitudes toward science, improve in their understanding of the nature of science, and more accurate perceptions of science careers than those students in classes which were taught by using textbooks.

On the other hand Mandeville, -Gavrett-K (199) studied the effect of in-service teacher training on achievement of students of 48 elementary school teachers who received in-service training in a program for effective teaching was compared longitudinally to the achievement of students of 34 teachers who have not received such training. No differences in achievement between the two groups of students were found.

In Jordan, Ebedat (1990) measured the effectiveness of the teachers certification program in improving their teaching behavior. Schoolteachers' behavior that had certification program plus B.A was compared with teachers' behavior that had B.A only. The results of the study revealed that there were significant differences between the two groups. For the benefit of the group of B.A and diploma holders.

Dirani (1995) studied the effectiveness of the teachers certification program in improving their teaching practices in the field of classroom teaching classroom management, relations with colleagues and students, and understanding the educational system in Jordan as perceived by the participants. The results of the study revealed that the degree of effectiveness of the program in improving their teaching practices as perceived by them was high in all fields except in the field of understanding the educational system in Jordan which was found to be low.

Alnhar, (1991) studied the effect of certification program on the effectiveness of teachers. The results showed that there were no significant differences between teachers who finished two courses and graduated teachers' in the effect of program. In addition, teachers expressed no need for certification, and 50% of them were frustrated and had negative attitude toward the program of certification because the program didn't meet their ambitions.

The Objective of the Study

The objective of this study is to answer the following question: Does the ESF program enhance the effectiveness of in-service teachers?

Hypothesis of the study

There are significant differences between the control group and the experimental group in the following domains: Planning, Objectives, Implementation, Evaluation and Annual Performance ($\alpha = 0.05$).

Definitions

Objectives: the ability of teachers to set objectives of teaching either for one year or for a day.

Planning: the ability of teachers to plan for teaching by using various strategies, managing the educational process, dealing successfully with individual differences, using suitable instructional materials and reinforcement.

Implementation: the ability of teachers to implement successfully their teaching plans.

Evaluation: the ability of teachers to evaluate all domains and activities of teaching process.

Annual Performance: the teaching performance of teachers throughout a year estimated by head teachers.

Methodology

The society of the study and its sample:

The society of the study consisted of all lower elementary cycle schoolteachers in North Amman, South Amman end Zarka areas. They are seven hundreds and fifty teachers. One hundred and seventy teachers of them finished the certification program in the summer course 1995-1996.

The sample of the study consisted of two groups: The experimental group which consisted of forty seven randomly selected individuals, and the control group consisted of forty nine randomly selected individuals out of those teachers who are not joining the program.

Instruments

Two instruments were built by the two researchers by referring to the relevant literature (Costa, 1980, Braskamp et al. 1984,Ebedat 1990). The first one was oriented to the school supervisors to evaluate the four domains of teaching: Objectives, planning, implementation and evaluation. Six items were devoted for evaluation of objectives; sixteen items, forty-one items, and nine items were devoted for evaluation of the other three domains successively.

The other instrument was used by the teachers to evaluate the annual performance of teachers. The last instrument consisted out of twenty-three items.

Validity

To validate the two instruments which are used by this study, they were submitted to eleven university staff members in educational science faculty in the Hashemite University to assess the content validity. The majority of staff members agreed Upon the two instruments as they were built by the two researchers conditioning rewording some items in the implementation domain, adding three items to the evaluation domain to be nine instead of six items and adding one further items to the annual performance of teachers to be twenty three items instead of twenty two.

Reliability

The internal consistency was determined by using Cronbach Alpha equation. The analysis yielded the following data shown in table one.

Table (1)
The Cronbach Alpha coefficient the two used instruments

No. of instrument	Domains	C.A.S
No. 1	Objectives	0.973
	Planning	0.976
	Implementation	0.994
	Evaluation	0.990
No.2	Annual Performance	0.958

These coefficients are acceptable for the purpose intended.

Results

The study aimed at investigating the hypothesis that there are significant differences between the control group and the experimental group in the following domains: Objectives, Planning, Implementation, Evaluation and Annual Performance.

The T-test was used to find out whether there were significant differences between the experimental and the control group in the five domains of the study. Tables number 2 and 3 show the results.

Table (2)

The differences between the control group and the experimental group in all domains conducted by supervisors

Variable	Group	Mean	S.D	T-Value
Objectives	control experimental	3.43 3.51	0.68 0.57	0.61 *
Planning	Control experimental	3.49 3.46	0.67 0.55	0.29*
Implementation	control experimental	3.12 3.30	0.62 0.48	2.18**
Evaluation	Control experimental	3.37 3.34	0.75 0.57	0.19*

* *Not sig. at* $\alpha = 0.05$

** *Sig. At* $\alpha = 0.05$

The results shown in table 2 indicated that there were no significant differences between the experimental group and the control group in the following domains: planning, objectives, and evaluation. It is only in terms of the implementation that difference between the two groups of the study have emerged.

Table (3)

The differences between the control group and the experimental group in the instrument by head teachers.

Group	Mean	S.D	T-Value
Control experimental	3.15 3.35	0.83 0.61	-1.38*

* *Not sig. at* $\alpha = 0.05$

The results shown in table three indicated that there were no significant differences between the control group and the experimental group in the annual performance domain.

Discussion

This study aimed at investigating the effect of ESF program on the effectiveness of teachers. The results showed that there were no significant differences between the control group and the experimental group in the following domains: planning, objectives, and evaluation. Only the difference in the implementation domain was significant. Likewise, a significant difference was not found between the two groups in the annual performance which was estimated by the head teachers.

In regard to the results of planning, objectives, evaluation, and annual performance, they are all consistent with previous findings (e.g. Alnahar, 1991 Rwaqa, 1994; Mansour, 1995,Mandevile, 1992). This consistency may be due to the similarity of the subjects of this study with the subjects of the previously mentioned studies.

Generally, the results of this study reflect the weakness of the ESF program for certifying in-service teachers. Also the program enhances neither setting objectives, planning, evaluation, nor annual performance of the participants'. It could be said that this weakness is due to the fact that the program didn't meet the needs of participants (Rwaqa, 1994), also the results are due to the negative attitudes of the participants toward The Educational Development Plan (Mansour, 1995).

In fact, the majority of the participants believed that their experience compensates for their study in the ESF (Alnahar, 1991). In addition, the supervisors and the head teachers may have negative attitudes toward the cerprogram .

The findings of this study could also be attributed to the participants' problems. Many studies (e.g. Alnahar, 1991; ALkantash, 1990, Albatah, 1992) found that the participants faced the following problems: (1) Lack of participants' time, (2) transportation difficulties, (3) lack of reference material in libraries, and (4) lack of concentration on practical issues. Furthermore, the courses don't meet the participants' developmental traits who are too old to attend such programs . Also there was lack of motivation to promote competence. In addition, the withdrawal ratio was 10%; [*] this ratio forced the faculty to accept even the 52-year-old participants in the program, which may decrease the effectiveness of the program.

The results may also be due to the difficulty in maintaining a balance between the teaching tasks and the study in the college. Also, ESF program was originally designed to the pre-service teachers which may make the program irrelevant for meeting the needs of the in-service participants. The negative results may be due to the previous impression that supervisors and the head teachers have already had about the participants regardless of the real effect at the program on them.

On the other hand, the findings of this study contrast with the previous past research (Meckler, ET al. 1985, Marzano, 1984, Liu, Chin-Tang, 1993). This research revealed positive results in respect to the effectiveness of the in service program. The discrepancies between this study and the previously mentioned studies are due to the nature and length of the programs which were used by the previous studies, they were short-term programs and concentrated on specific issues. But the ESF program is a long-term one.

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[*] The Annual Statistics Book of the Ministry of Education

We can't compare the findings of this study with those of (Ebedat, 1990, Dirani, 1995) findings, because the subjects of such studies were different.

On the other hand, the findings revealed significant differences between experimental group and the control group in the implementation domain which was estimated by the supervisors. This finding partially contrasts with Alnahar's study. This result is due to (Alnahar, 1991). Supervisors' evaluation, which seemed to be concentrated on the practical performance of teachers in classroom situations In addition they may have neglected the other the other domains such as planning, objectives and evaluation. This negligence is due to the previous attitude which was held by supervisors. Yet, the two researchers may suggest doing further research focusing on participants themselves to assign their attitudes, and to observe teachers' performance in teaching-learning classroom situations, or conducting interviews. These procedures could lead to different results.

References

Albatah,Ahmad, (1992). A survey study of the Problems at high teacher's certification college. Mu'ta Journal. Vol. 7NO. 3 p.p5- 1 1 5.

Alkanash,Mousa, (1990), Motives of in-service teachers in high teacher's certification college and its relation with sex, years of experience, specialization, M.A thesis, Jordan University.

Alnhar.T& Ahlawat.k (1991), Evaluation studies for certification Program in high teacher's certification college. The National Center for Research and Educational Development. Amman-Jordan.

Arthur l. Costa (1980), Developing Minds: A resource book for leaching thinking. New York pergamon press.

Dirani M.Eid (1995), The effect of the teacher's certification program in improving their teaching practices. Study presented to Dirasat Journal, Jordan University.

Ebedat, Zeid, (1990) measuring the effect of educational certification on enhancing vocational behavior and performance of teachers. M.A.thesis. Jordan University.

Jaradat Ezat (1992) The Educational Development in Jordan: Philosophy &attitudes, Risalat AL-Muallim Vol.33.published by the Ministry of Education Amman-Jordan.

LarryA.Braskamp, Dalc C.B, John C.O (1984) evaluating teaching effectiveness, practical guide, Say Publication INC.London.

Liu, Chin-Tang, and (1993) evaluating the effectiveness of an in-service teacher education program: The IOWA Chantanqua program DAI-A 54\02,P.475.

Mandeville, -Garrett-K, (1992), Does achievement increase over time? Another look at the South Carolina PET Program. Elementary School Journal Vol.93 NO.2 P.117.

Mansour, Esam. (1995), Attitudes of teachers, supervisors and head teachers in Amman Alkubra toward educational development plan.M.Athesis Jordan University

Marzano -Robert-J; ET at. (l984) A study of select school effectiveness variables? Some correlates that are not causes. ED 253328.

Meckler, -Terry-Anne; Vogler-James-D (1985)? Curriculum mapping and instructional planning for pupil achievement. Paper presented at the Annual Meeting of the American Educational Research Association ED 254560.

Rwaqa, Ghazi (1994), The Opinions of teacher students on to what extent the vocational certification program courses meet the vocational requirements in the first basic cycle. Abhath Alyarmouk journal. Yarmouk University. VOL.1 1 NO. 10. Edition NO.3. P.p549-571

Rwaqa, Ghazi, (1996). A study of the problems of field teacher's (vocational education) the teacher's certification program at Yarmouk University. Journal of Arab Universities Union No.31 1 pp. 159-182.

UTILIZATION INSTRUCTIONAL TECHNOLOGY SERVICES BY FACULTY MEMBERS AT SULTAN QABOOS UNIVERSITY

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INTRODUCTION

Educational technology, as a systematic application of technological processes and resultant products to the practical problems of education, ha been proven both powerful and versatile in improving the efficiency and effectiveness of educational systems (Benson and **Hirumi, 1994,** Hirumi, Harmon, and Palumbo, 1994, Reiser, 1987). Integration of emerging technologies in the classroom has been a focal point for contemporary research on media attributes (Bork, 1987, Cornell, 1984, Hooper & Hannafin, 1988,). However, much of the current research, focuses on strategies for perfecting the interaction between students and machines.

Although research on media attributes is of great importance, such research should not overshadow issues and questions concerning utilization of technology, and teacher's empowerment with educational technology (Aust, 1993). It is apparent that research on utilization of technology is needed to determine how technology can improve the interaction between learners and teachers? and how technologists and administrators can best serve to empower teachers with technology.

There are so many factors that may affect teachers' utilization of technology such as availability of technology, teacher's role, teacher's knowledge, awareness of available technology, teacher's workload, and perceived lack of understanding and inconvenience (Aust & Padmanabhan, 1994). Previous research has shown that teacher's prior training and perceptions of instructional media affect the frequency of media utilization in the classroom (Abu-Jaber, 1996).

Despite the factors that affect media utilization, higher education institutions have dramatically increased spending for educational technology during the last two decades (Eidgahy & Bennett, 1991). As a result, technology centers have been established in many institutions of higher education to cope with the challenges of development and modernization, and to support their instructional and research programs. Educational technology centers, according to the Association for Educational Communication and Technology (AECT) Standards, should act as proactive facilitators that can provide support in at least five major areas:

(1) Support for instructional development.
(2) Access to information resources and methods-of teaching and learning
(3) Distribution of information resources.
(4) Use of information resources.
(5) Creative development of information resources.

Apparently, each technology center is unique in terms of its goals, and the needs of the instituti. However, effective technology centers in all institutions usually support each of the above areas in varying degrees.

To date, there has been growth in all areas of instructional technology in developing countries including the availability of usable equipment and materials, and the number of individuals trained in the design, development, and use of technology. Sultan Qaboos University established a large and sophisticated Center for Educational Technology (CET) in 1986. The CET has six departments: Graphics, Photography, Instructional Development, Video and Audio Production, Technical Services, and Media Services. The main objectives of the CET are:

(1) To provide assistance to all academic departments in order to improve the efficiency and effectiveness of the teaching and learning processes.

(2) To provide necessary expertise and guidance in the use of a wide range of instructional media.

(3) To render consultative advice and guidance to faculty members in the selection, production, and utilization of educational media.

(4) To provide advice and guidance to projects, and maintenance in the planning and installation of audiovisual equipment in new colleges.

Thus, it seems that the CET is taken as a dynamic example in the production, development, and use of educational technology. It is also spending a large amount of money on the hardware, and software of foreign culture. In order to insure the success of its services, the CET conducted a study to assess the instructional support needs, the attitudes, and experiences of faculty members at Sultan Qaboos University in their use of the facilities offered by the center (CET 1991). Although the overall response rate was very low (about 35%) the results of the study provided useful guidelines, and direction for the CET in planning its services, and facilities.

The questions, however, are: How are the center's resources being utilized? Is technology available in CET being used in various academic departments where commitment to excellence in teaching should be highest? This study attempts to answer these questions by examining the extent of use of CET services by faculty members at Sultan Qaboos University, and the **reasons** for not using the available services.

Statement of Problem

It appears that the CET meets most of the Association for Educational Communications and Technology standards for technology centers in terms of the major areas that it supports. It is organized around the concept of offering a wide variety of services and media to all academic and Instructional departments in the university, with consultative help, and other services provided by professional media specialists and other technology center personnel. It also appears that CET E has been operating on the assumption that the provision and utilization of high quality instruction are good. This study tests the validity of this assumption, and contributes to the elaboration of directions to sound decisions for future services.

Significance of the study

No matter how well technology providers think they know their service users, formal feedback from clients can bring an improved view of their needs. This study is expected to provide needs assessment in order to plan for long and short range goals for the C ET, and to provide valuable data that can serve as a tool for planning future growth and program directions. Decision makers and administrators usually need information in timely, accurate, accessible and usable forms (Wilson, 1995). Data can also be used to determine which services are preferred by faculty members, and which services should be added, and which services are no longer needed. Thus, establishment of budget priorities for materials, services, and equipment purchases could be determined accordingly for the coming years. Finally, this study is expected to result in an increased awareness of faculty members to the services provided by the C ET, and find reasons for abandoning outmoded practices, and for planning creatively for new forms of instructional media services.

Research Questions

The study attempts to answer the following research questions:
(1)To what extent are faculty members aware *of* all services provided by the CET?
(2)To what *extent do faculty members use the* technology services provided by the CET?
(3)To what extent are faculty members satisfied with the services provided?
(4)Are there any statistically significant differences in the use of technology services due to demographic variables (e e.g. academic rank years of experience, areas of specialization, length of time at SQU, and work load)?
(5)What are the future priorities of technology services, and audio visual materials?

Limitations of the study

This study was limited to service in was limited to services provided by the following departments in the Center for Educational Technology: Graphics, Photography, Instructional Development, Video and Audio Production, Technical Services, and Media Services. Services provided by Computer Centers, and the Audio Visual Department in the Main Library were not included in the study. The study is also limited to the academic staff in the seven colleges of Sultan Qaboos University.

In addition, the data for this study were gathered solely by means of the questionnaire method and the conclusions are dependent on such data. The accuracy of information obtained is dependent on how accurately respondents answered the questions in this questionnaire.

Methodology

Sample

The population of this study included 425 faculty members in all departments in various disciplines at Sultan Qaboos University who have been with the university for at least one academic year. The sample of the study consisted of 265 (62.3%) faculty members distributed as shown below in table 1.

Table (1)
The distribution of faculty members according to college, population, and sample of the study

College	Population	Sample	% of sample
Agriculture	43	32	12.1%
Arts	65	25	9.4%
Business & Commerce	23	17	6.4%
Education	75	45	17.0%
Engineering	40	28	10.6%
Medicine	50	29	10.9%
Science	85	56	21.1%
Language Center	44	33	12.5%
Total	425	265	100%

Instrumentation

A questionnaire was designed to obtain data about six major areas: (1) general information; (2) faculty members' awareness of CET services; (3) faculty members' use of services provided by CET; (4) faculty members' satisfaction of quality of services provided; (5) improvements; and (6) Future services.

The questionnaire consisted of a (76) items centered around the above six areas. It was based mainly on the Association for Educational Communications and Technology standards for technology centers (AECT, 1989), with some adaptations to Sultan Qaboos University, and CET facilities. To obtain its reliability, the instrument was administered twice in a three week period to a randomly selected group of 40 faculty members from the population of the study. A test-retest reliability coefficient was calculated accordingly. It was found to be 0.84.

Data were analyzed using descriptive statistics such as means, standard deviations, and frequencies. Analysis of variance (ANOVA) was also used to compare the use of technology services according to the type of college, faculty ranks, years of experience, and work load.

RESULTS AND DISCUSSION

This study was designed to examine the extent of use of instructional media services offered by the CET by faculty members at Sultan Qaboos University. It also examined the extent of awareness, satisfaction, and future priorities of all services provided by the CET. In addition, the study examined the relationship between the degree of utilization of technology services and demographic variables such as type of college, faculty rank, years of experience, and work load.

In response to the question related to faculty members' awareness of all technology services provided by the CET the results showed that 180 (68%) of the respondents indicated that they were not adequately informed a bout the services vices offered by the CET. Related to the same question of awareness, faculty - members were asked about "how" they get their information about CET services. The results revthat more than half of the respondents knew about the CET, services through "visiting CET', and through "colleagues" 153 (57.7%), and 134 (50.6%), respectively. More than one fifth 58 (21.9%) of the respondents received information through "handouts, fact sheets, and brochures". Whereas the least used information dissemination methods were "new faculty orientation, and telephone directories", 47 (17.7%), and 39 (14.7%), respectively. Since the most frequent information dissemination methods were "visiting CET", and "colleagues", it is apparent that getting information about CET services is usually initiated by faculty members not the CET This may explain the extremely low level of awareness among faculty members, where more than two thirds of the respondents were not adequately informed a bout the available technology services at the CET.

Regarding the most and least preferred methods for getting information about CET, services, the results showed that the most preferred information dissemination was through "Publishing a special CET, newsletter", 167 (63%), followed by "holding faculty and staff orientation each semester", 146 (55.9%). Whereas the least preferred method was "publishing information in the university newsletter", which is usually published once a semester, 95 (35.8%). Followed by "sending information addressed to me" 1 06 (40%).

In response to the questions concerning the degree of utilization of the CET services by faculty members, findings indicated that only 21.9% of the respondents used the services offered by the CET. However, when asked about the reasons for not using the services, the respondents indicated that 'no need for service" was the most frequent reason (74.5%), followed by 'unaware of service" ((12.4%). Apparently, the utilization of CET services is extremely low, since only one fifth of the respondents used the services provided. This can be attributed to the incongruence of the services provided and the instructional needs of faculty members, and to the lack of awareness among faculty members about the available services. Research on media utilization (Aust Allen, & Bichelmeyer, 1989, Grady, 1988, Maeroff, 1988, McDonald, 1989) provides compelling evidence that technologies of instruction have a high degree of failure when teachers do not believe they are significantly involved in and empowered by the technology. Moreover, it can be attributed to the moderate and low level of satisfaction among faculty members regarding the effectiveness and efficiency of the CET services.

In order to further examine the question related to the use of technology services, ANOVA was used to determine whether there are significant differences in the use of CET services dye to type of college. Table 2 shows a main effect for the use of technology services by various colleges, F (7.239) = 6,91, $p \leq 0.05$ However, after using Scheffe test to compare the means of the seven colleges, it was indicated that significant differences exist between the college of Medicine and the colleges of Business & Commerce, the Language Center, Science, Engineering and Arts.

Table (2)
Use of CET by various

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	7	3.3652	.4807	6.9132	.0001
Within Groups	239	16.6201	.0695		
Total	246	19.9853			

Whereas no significant differences were found between the college of Medicine and the colleges of Education and Agriculture. This may be attributed to the practical nature of most courses offered at these colleges. In addition, some colleges and centers such as the college of science and the language center often use their own equipment, computer and language laboratories.

Data also revealed that there is a significant difference in the use of CET services due to the academic rank of faculty members as shown below in table 3.

Table (3)
Use of CET services by academic rank.

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	6	1.8417	.3069	4.0602	.0007
Within Groups	240	18.1436	.0756		
Total	246	19.9853			

However, Scheffe test indicated that the significant differences were found only between associate professors and lecturers in favor of associate professors. However, this difference can be attributed to the fact that associate professors have less teaching, workload than lecturers. For example, associate professors' teaching load is usually between 6-12 credit hours. Whereas lecturers' teaching workload exceeds 14 credit hours. Research has shown that educational technology strategies are likely to be more accepted if educational technologists make an effort to accommodate or lessen the teacher's workload C Bichelmeyer, 1991, Wolcott, 1981). The results also indicated that there are no significant differences in the use of CET services due to the length of time at Sultan Qaboos University.

In order to determine their satisfaction of the quality of the services provided, faculty members who used CET ET services were asked to rate their level of satisfaction and provide reasons for not using, the available services. The results revealed that 180 (73.3%) of those who used the services were moderately satisfied with the effectiveness and efficiency of such services. However, more than one fourth (26.7%) of the respondents who used the CET services were not satisfied with the quality of the services provided. In addition, those who did not use the services were asked to provide comments, and reasons for not using CET services. Some of the frequent comments included the following: "Production of photographs, slides, and graphics, is poor and slow"; "slides are sometimes lost or damaged"; "video production staff are not punctual"; "it takes long time to edit and copy video cassettes" CET staff refuses to do requisitions related to art work,; "Overhead projectors in the classrooms are not regularly checked to make sure that they are equipped with new rolls of transparencies, and spare bulbs".

With regard to future priorities of technology services, faculty members were' asked to rank order the top five instructional media and materials that will be in most demand for the next five years. Findings indicated that computer assisted instruction was ranked number one, followed by video cassettes, synchronized slides, microcomputer programs, and overhead projection. The least needed instructional media in the next five years were filmstrips and television. These results are consistent with the general trend of emerging technologies where computer and video materials are widely used in both educational and training settings. Also research on media attributes suggests that computer and video technologies can enhance learning through various types of interactions, self-paced strategies, and invested mental effort (Cennamo 1993, Kozma 1991, Kozma, 1994, Ullmer 1994)

In addition, faculty members were also asked to recommend service areas that need to be improved, or initiated by the CET The results showed that more than two thirds of the respondents indicated that "arranging for regular workshops", and offering in-service training for faculty members" were the top ranked areas that need to be improved by the (CET), 181 (68.3%), and 180 (68%), respectively. It appears that recommendations of such service areas are consistent with the forecasted future priorities of faculty members. Research also shows that teachers may not accept technology, if they do not understand its use C Cuban, 1984). Thus, an emphasis on more in-service training and workshops was made by faculty members. Whereas, "assisting faculty members in revising instruction" was the least recommended area to be improved. This can be attributed to the fact that faculty members usually get their services from technicians who are not specialized in instructional design and development.

RECOMMENDATIONS

The following recommendations can be drawn from the findings of this study:

- The CET should publish and disseminate a newsletter that contains updated information about its technology services. It should also conduct frequent orientation sessions for both new and incumbent faculty members.
- Advances in computernetworking technologies should be used to improve services. and communications among faculty members and CET staff.
- CET should conduct a series of workshops, media demonstrations, and seminars on the use of different types of instructional media that can help faculty members to improve their instructional processes, and cope with emerging technologies.
- CET services should be based on instructional needs of faculty members so that utilization of the available services can be improved.
- Based on forecasted priorities, CET should invest, and allocate most of its resources for computer assisted instruction and other types of interactive technologies
- The CET should upgrade its staff qualified instructional designers, and technologists who can work effectively with faculty members in revising their instruction utilizing media.
- Further research should be conducted to examine the efficiency, and effectiveness of the services provided.

References

Abu-Jaber, M. (1996). Student teachers' use of instructional media and its implications on Sultan Qaboos University in the Sultanate of Oman. *international Journal of Instructional Media 23, (1), 59-78.*

Association for Educational Communications and Technology (1989). *Standards for* ***College and University Learning Resource*** *Program: Technology in Instruction.* Washington, DC.

Aust, R. (1993). Wide area network resources for teacher education. In M. R. Simonson (Ed.), *Proceedings of Selected Research Papers 1993 AECT, (115-123).* Ames, LA, Iowa State University IRC.

Aust R. Allen G. & Bichelmeyer, B. (1989) Integrating instructional technology in educational institutions: The proper role for teachers. In *M R. Siimonson (Ed.), Proceedings of Selected Research Papers 1989 AECT, (41-56).* Ames, LA, Iowa State University IRC

Aust, R., & Padmanabhan, S. (1994). Empowering teachers with technology: An agenda for research and development. In M. R. Simonson (Ed.), *Proceedings of Selected Research Papers 1994 AECT, (15-29).* Ames, LA, Iowa State University IRC.

Bichelmeyer, B.A. (1991) *The pilot implementation of an educational resource network. A naturalistic study* Doctoral dissertation, University of Kansas.

Bork, A. (1987). The potential *for interactive technology, Byte, 12, (2) , 201-206.*

Branson, R. K., & Hirumi, A. (1994) Designing the future: The Florida school year 2000 initiative. In Kearsley, G., & Lynch, W. (Eds.) *Educational Technology Leadership Perspective (pp. 91-112* Englewood Cliffs, NJ: Educational Technology Publications.

Cennamo, K.S. (1993). Learning from video: Factors influencing learners' preconceptions and invested mental effort. *Educational Technology Research and Development, 41 (3). 33-45.*

Center for Educational Technology (1991). *Report on CET Survey* of *Instructional Support Needs. The attitudes, motivation, and experiences of the faculty at*

Sultan Qaboos University in their use of the facilities offered by the Center for Educational Technology logy SQU,Oman.

Cornell, R.A. (1984). ***Emerging Technologies: Ideas for Education.*** Orlando, Florida: University of Central Florida.

Cuban, L. *(1984) Teachers and machines. The classroom use of technology since 1920. New York:* Longman.

Eidgahy, S. Y., & Bennett, R. V. ((1991) What does Higher Ed think about educational technology services. *Tech Trends, 36, (4), 25-30.*

Grady, D. (1988) Giving teachers their due. *Kappan 70, (3) 31.*

Hirumi, A. Harmon, S., & Palumbo, D. (1994) TEA3M: A system for infusing technology into teacher education. In M. R. Simonson (Ed.), *Proceedings of Selected Research Papers 1994 AECT (259-274).* Ames, LA, Iowa State University IRC.

Hooper, S., & Hannafin, M. J. (1988). Cooperative CBI: The effects of heterogeneous versus homogeneous grouping on **the learning** of progressively complex concepts. *Journal of* ***Educational*** *Computing Research, 4, 413-424.*

Kozma R.B (1991). Learning with media. Review *of Educational Research , 61, 179-2*11.

Kozma R.B (1994). Will media influence learning,: Reframing the debate. *Educational Technology Research and Development 42 (2) 33-45.*

Maeroff, G.L. (1988) A blueprint for empowering teachers. *Kappan, 69, (7),* 4 72-4 76.

Reiser, R. A. (1987). Instructional technology: A history In R. M. Gagne (Ed.), *Instructional Technology Foundations (pp. 11-48).* Hillsdale, NJ: Lawrence Erlbaum Associates.

Wolcott, H. (1981). Is there life after technology? Some lessons in change. *Educational Technology, May 24-28.*

SCHOOL-BASED MASTER'S PROGRAMS REFORM FROM WITHIN THE SYSTEM

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USA

INTRODUCTION

Shenandoah University, established in 1875, is located in the beautiful Shenandoah Valley of Virginia. Situated in the small city of Winchester, we are 72 miles (approximately 120 kilometers) from Washington, D. C. the nation's capital. The University is a private, coeducational school offering both a broad liberal arts program and an emphasis on career preparation. Its 2200 students are provided opportunities to study in the Schools of Arts & Sciences, School of Business, Health Professions, Pharmacy and the Shenandoah Conservatory of Music. Masters degree programs are available in each of the schools. The School of Arts & Sciences offers the following graduate programs of study related to educators:

- Master of Science in Computers in Education
- Master of Science in Education- - Administration
- Master of Science in Education - Teaching
- Master of Science in Education - Teaching (International)
- Master of Science in Education - Reading Specialist
- Master of Science in Education - Teaching English to Speakers of Other Languages

Objective

Shenandoah University has long viewed itself as a responsible educational partner in the tri-state region which consists of the states of Virginia, West Virginia and Maryland. The University has observed and recognized the need to become involved in the school reform effort that has impacted upon education in the United States. We recognize the need for classroom teachers and administrators to constantly upgrade their professional knowledge and skills in order to meet effectively the challenges of a changing educational setting and climate. To address these needs our faculty has established extensive partnerships with public and private schools so that we can remain attuned to developments and needs in basic education. Our undergraduates, as a part of their educational preparation, serve as tutors, teacher assistants, student teachers and even substitute teachers. Our graduate students perform internships and conduct research in and for the region's schools. In the development of these partnerships and service functions the University has been able to recognize the need for establishing programs that directly impact on the improvement of education. To accomplish our objectives we have focused on the improvement of teachers' knowledge and classroom skills, and the development of effective educational leaders.

The Cohort Concept and System

Of the six Master of Science in Education (MSED) degrees this paper focuses on the

three programs that utilize the cohort concept and system (CCS) in a school-based setting:
MSED-Teaching, MSED-Reading, and MSED-Administration. The CCS is a defined group of students who matriculate into and pursue the program together.

The primary purpose of the CCS utilized in the MSED program is to promote School bbased reform within a school system by providing an opportunity for a critical mass of teachers to pursue a masters degree while continuing to teach within their own school district.

> *[The MSED] "program of study has brought new energy into mediocre classrooms; has stimulated thinking in teachers that has overflowed to the students making their school day more enriched; has provided creative techniques for instructing students, and has helped in the development of new curriculum ideas that will be used in the future. These teachers are actively involved in producing changes that will ultimately benefit the students in our county" (Assistant Principal, Hardy County, WV).*

The programs combine school site-based evening classes with intensweekend classes and summer courses designed to facilitate the schedule of a practicing educator. CCS students enter the program of study assigned to a cohort group with which they take classes throughout the masters program. The cohort group should create a supportive network and learning environment for those enrolled in the program.

Different cohort groups are created for the differing needs of the programs. Since teachers in the MSED-Teaching program work in the same school district, they may already know many members of their cohort group. Often they will develop close relationships with the members of their group during the three-year period they are together. Likewise, educators enrolled in either the MSED-Administration or the MSED-Reading programs become part of a cohort group. These educators come from a variety of school districts, but they all share a common interest in becoming school administrators or reading specialists. A sense of camaraderie develops among members of all the cohorts. They consult with each other and share experiences from their individual classrooms or school districts. These professional interactions contribute to their growth both during their masters program and throughout their professional careers.

Faculty

Faculty for all programs include permanent university faculty as well as community faculty active in their respective disciplines. Some community faculty may have had limited university teaching experience prior to becoming involved in this program, but all hold appropriate degrees and all are active in their fields in positions such as reading specialists, superintendents, supervisors, attorneys, business managers, industrial leaders, and principals. These faculty members provide the program participants with a first-hand perspective on the broad issues confronting reading specialists, administrators and teachers.

Curriculum

All of the masters degree programs include core components. All require a research component and a capstone experience. The MSED-Administration program requires a practicum experience and a final self-evaluation project. The MSED-Teaching and

MSED-Reading programs require a thesis as a capstone experience. All MSED students complete research and share the analyses with faculty committees.

CCS program completion is designed to result in career advancement. The MSED-Administration and the MSED-Reading programs result in additional state licensure endorsements. The MSED-Teaching program is designed to enhance the role of a teacher in the decision-making processes of education.

Data Collection and Analysis

Teacher research was defined by Cochran-Smith and Lytle (1993) as being a "systematic, intentional inquiry about teaching, learning and school carried out by teachers in their own school and classroom setting" (p.27). The term teacher research is derived from the concept of action research which Corey (1953) identified as the process by which educators find solutions to everyday problems through the systematic study of their practices.

Since the inception of the MSED programs in Fall, 1990, five cohorts have completed the MSED-Teaching program, resulting in 70 published theses, 22 theses-in-progress, eight students on delayed completion, and eight students on leave from the program. The majority of published theses appear to share the characteristics of teacher research in that sixty-nine percent have dealt specifically with teaching practices, the effects on achievement of school programs or scheduling, or curricular issues in language arts, mathematics, physical education and special education.

Partnership Concept

The partnership between Shenandoah University and a school system begins with discussions of educational needs and the ways that university faculty and school personnel can work together to meet those needs. Usually one person in a school system is chosen to be the liaison with the university faculty advisor so that clear, timely, and trustworthy communication lines are set. In one school system, the school faculty elected a committee of spokespersons to meet initially with the university representatives, and then the assistant superintendent assumed the liaison position.

In the next phase of the partnership, the discussion focuses on the MSED degree and how it can be shaped through course selection and modification to meet the needs of the particular school system. Once the degree design established, the faculty degree advisor and the school liaison decide the guidelines for technological, staff, communication, research, financial, and editorial support for degree candidates. Within-school-system procedures vary in terms of specifics, but most usually define parameters for research approval, reporting, and ethics. University procedures define the parameters for course instruction, research studies, approval processes, student matriculation, and student evaluation. In many cases, university and school procedures are parallel or co-dependent and logical. School systems are also responsible for recruiting teachers for the program by distributing the university's promotional brochures to their teaching staffs.

In the final phase, the partnership moves to the evaluation stage. Teachers have completed their research, written their theses or self-evaluations, and publicly defended their work. The teachers and school officials complete evaluations the program, its instructors, the curriculum, its effects and its mission. Cyclically, these evaluations prove useful in making revisions for the next design phase, when new programs are sought, either by the same school or one with whom we have not yet worked.

> *"The concept of bringing a school-based Master's level program to a rural community area has provided an opportunity for the teachers in our county to renew their dedication to teaching as well as to revive technical skills that have be neglected due to the lack of post-bachelor degree facilities in the surrounding area" (Assistant Principal, Hardy County, WV).*

This partnership strengthens the knowledge and experiential base of the university faculty who travel to the schools' environments to meet and instruct the teachers who are on the front lines of education. These interactions and observations result in a stronger graduate and undergraduate teacher education program at the university because the education faculty are current with the local and regional issues, events, policies, student problems, and teacher concerns.

The MSED-Teaching and MSED-Reading thesis research adds another dimension of strength because as the education faculty members serve on thesis committees, they are continually updating and expanding their working knowledge of a wide range of educational research topics. Further, these thesis committees often include Arts and Sciences Faculty who chair or read theses pertaining directly or tangentially to their discipline, thus extending the partnership and widening the circle of participants in educational reform.

The MSED-Administration Self-Evaluation is a two-part process. First it involves the preparation of a professional portfolio designed for self reflection and analysis. It displays the individual's best work in preparation for leadership. Some of the documents included are a vision paper, a writing sample, examples of leadership experiences and a major project prepared during the practicum. For a culminating experience the candidates present themselves and their portfolios to select panels for review. The panels include community faculty and full-time university faculty. The community faculty involved represent all levels of educational leadership. Upon completion of the review, the panels present the candidates with summaries of their findings.

> *"As an individual who conducts many administrative and having served on one of the interview teams, I believe this very practical experience was an important growth opportunity for the candidates as well as an informative one for the interviewers" (Assistant Superintendent, Frederick County, VA).*

Delivery Mode

The MSED degree consistently has been evaluated as highly convenient by the gradof the programs. Common characteristics of the programs include school-site-based availability of applications, course registration, book-selling, and course meetings.

> *"Teachers can continue to meet their professional responsibilities while involved in a graduate program more easily when travel time does not leave them exhausted for their next day's work" (Assistant Superintendent, Frederick County, VA).*

Contact between students and advisors occurs initially at orientation meetings and continues through class, phone, mail, or email contacts. Course meetings during the semesters are held on one evening each week or on four weekends. Course meetings during the summer months when the teachers are not working are given in intensive week formats with major papers or projects due a month later. Often those intensive weeks are given on the main campus and are an opportunity for a MSED cohort's teachers to mix with other teachers from the region, state, or nation who have gathered for that specific class. In those cases, spaces in the class are always reserved for those in cohorts needing that course for their degree plan. Students at the end of their programs return to campus for two culminating events: thesis defenses and commencement.

Financial Considerations

The MSED degree is also economical for teachers for two reasons: the Shenandoah Scholarships for Practicing Educators, and the individual school systems' policies for supporting their teachers in advanced studies. The scholarship supports approximately two-thirds of each working teacher's tuition, and makes the cost of attending a private institution very competitive with the state-supported institutions' tuitions. When that scholarship is coupled with individual school systems' financial support (from $125 per year to full tuition), and then the bonus of not having long commutes to distant universities is added (saving time, energy, and transportation costs), the result is a major economic advantage to the teachers.

> *"Shenandoah University has made a significant effort to provide a very attractive fee structure for local educators. Without a doubt, this has allowed many individuals to pursue a master's program who otherwise would not have been able to do so" (Assistant Superintendent, Frederick County, VA).*

Evaluation

The MSED degrees are evaluated in many ways. Students evaluate each course and professor at the end of each semester. The program advisor observes and evaluates each community professor used to teach courses in the program of studies. Informal evaluations and feedback are used routinely for maintenance and quality control purposes. After graduation, each teacher is asked to evaluate the entire program of courses and the processes of the degree from delivery modes to thesis or project defenses.

> *"I felt that the program was very beneficial to my growth as an educator as well as an individual. This experience was the best and the most difficult I have ever had. The sense of accomplishment I have felt since completing the thesis will remain with me always" (Teacher, Frederick County, VA, Cohort #1).*

Each school system is asked to evaluate the effects of the program on its teachers, students, curricula, and/or operations. Those responses and all evaluations are used to improve and strengthen our MSED degrees on a continual basis to ensure client satisfaction.

Problems

Delivering a degree program within the context of a particular school jurisdiction and by means of a structured cohort system creates both unique problems and opportunities. The value of the method thus must be assessed in terms of trade-offs of problems and benefits to all three of the partners.

Instructional Problems :Classroom Dynamics

Theoretically, CCS students remain with a group throughout most, if not all, of the program. Occasionally, a small number a. new students may be added to the group during the course of the cohort cycle. However, the composition of the group as a whole does not change significantly during that period. This stability may create a context in which the group gradually becomes overly predictable in the dynamics of their intellectual development. It also may create a situation in which the group as a whole settles into a routine acceptance of group roles which, in turn, may diminish the incentive to approach each course with a new perspective.

Because there is a high degree of interdependence among members of the co, students require a higher degree of accommodation to situational needs from their fellow students and from the instructor. Since the sequence of courses for the cohort is fixed, a family crisis, unexpected school responsibilities or other type of interruption pulls the student out of sequence. This change affects the group as well as the individual. Some students who must "stop out" because of temporary problems sometimes find it difficult to reenter the program without the support of their original group.

With such an integrated and focused approach, the cohort method requires faculty to be unusually aware of the group dynamics and the context in which the cohort operates in their school sites. Politics within a district may be carried into the academic discussion. Some students may be comfortable in the progressively familiar class environment, others may not. The challenge for the faculty is to modulate the dynamics so that all students are required to think with new insight. In districts where acceptance of change has been difficult, the instructor must be alert to introduce ideas and perspectives which challenge the entire group's sense of futility in accomplishing reform.

Management Problems

Personalizing the entire degree process within the framework of the cohort system requires a significant commitment of faculty time for distance communications and travel. For a profession which traditionally emphasizes the high value of face-to-face contact, the cohort method requires the reorganization of contact time. While email can be used to overcome both distance and time and assists in handling many mechanical questions, it does not eliminate the need for direct contact in office hours with the faculty advisor or instructor.

Record-keeping in the context of the cohort requires more intense tracking and coordination of information than conventional enrollment programs. The institution thus needs to be able to accommodate administrative needs which fall outside its regular systems. For example, for successful coordination with school jurisdictions, it may be necessary to operate a particular cohort on a modified calendar which runs counter to the established institutional calendar. On-site registration may require commitments of additional out-of-office staff time and travel to ensure completion of all necessary formalities. The necessity for continuous cohort follow-ups also requires a significant commitment to administrative tasks.

The movement of the cohort through the course sequence ultimately brings the group to the thesis or final assessment stage, for the most part simultaneously. Managing the development and flow of thesis proposals and project documentation from original concept papers through formal presentation to committee review and defense requires unusual resources of faculty item and diversity to accommodate the simultaneous process. The thesis load, just as the course load, comes in cohort size. The implications of this cyclical phenomenon affect staffing decisions and allocation of resources which, at times, are at variance with conventional institutional expectations.

Opportunities

Operating the on-site, cohort system does create unique problems within a conventional administrative institutional structure. However. there are significant benefits which, in our experience, more than offset the problems and create opportunities which are not achievable under regular approaches to graduate education.

Extended Discussion

The cohort system can be viewed as a continuous course of two-and-a- half to three years in length. Since the cohort is focused on the interests and needs of the school jurisdiction the extended exposure within the cto real educational issues facing their districts amounts to more than 300 hours of discussion. Multiplied by the number of students, this exposure amounts to an enormous amount of participation in the discussion of school concerns. Compared to the typical in-service program which may provide as much as 40 hours per year of teacher participation, the benefits from the MSED program to the jurisdiction as a whole are noteworthy.

> *"Not only has it allowed a significant number of our teachers to pursue Masters Degrees who otherwise would not have done so, but the emphasis on effective school program has already directly impacted the quality of instruction in Hardy County Schools" (Superintendent, Hardy County, WV).*

Direct Application

Faculty and students can see the practical relevance of their investment of time and energy in their academic work, sometimes almost immediately. The thesis research project may be the result of a classroom innovation conceived as a result of coursework and executed under the supervision of a university faculty member. Frequently, a degree student may recruit school colleagues who are not part of the program to participate in and assist with a particular innovation, thus extending the effect of the individual project to other teachers in the school. With administrative approval and encouragement, thesis and practicum projects may be turned into school projects, sometimes with relevance for policymaking. Thus, the actual impact of the MSED program may extend far beyond the classrooms of cohort members.

> *"Our teacher graduates have had a great impact on restructuring our instructional program. At the middle school level, we have implemented the team teaching concept very successfully, as a result of the work teachers accomplished during the graduate program" (Superintendent, Charlotte County, VA).*

Leadership Development

For school jurisdictions, the cohort system allows over an extended period of time for the development of a more highly qualified and confident faculty among whom there is a common foundation for discussion of district issues. For teachers, there is the significant benefit of a developing pool of colleagues who have a basis for understanding new ideas.

This pool thus becomes a support network for the teacher who has the confidence to undertake the risks of innovation well beyond the structure of the program.

> *"...we anticipated this core of teachers would become our instructional team leaders to provide leadership to implement important changes in instruction that would enhance student achievement" (Assistant Superintendent, Charlotte County, VA).*

The partnership among the three sectors in descriptive terms has achieved the goals established at the inception of the cohort concept. Now that a critical mass of graduates has been achieved in all three programs, the University intends to undertake in-depth research to begin to examine and document its basic premises.

International Implications

Based on our beliefs and experience the CCS also has relevance for international student applications. In previously hosting a cohort of international students who pursued the MSED-Administration, the university was able to support their unique academic and social needs more effectively than in traditional enrollment programs. Using the CCS we were able to provide special translation and study services, cultural and travel opportunities, and an intensive intern experience in the public schools. Many of these students have established long-term relationships within the school and with the University that are still supportive of them after graduation. Based on that positive experience we have developed a MSED-Teaching program for international students which provides an introduction to American educational practices as well as experiences in cross-cultural education.

Summary

For more than a decade the United States has been torn by controversy over the effectiveness of its public schools. The often quoted "Nation At Risk" report (National Commission on Excellence in Education, 1983) contributed mightily to the attack on education with its comment that, "If an unfriendly foreign power had attempted to impose on America the mediocre educational performance that exists today, we might well have viewed it as an act of war." Today, however, "there is the growing, if grudging, acknowledgment that public education is not terminally ill"(Kaplan, 1996, p.K9). Shenandoah University recognizes that the ills and solutions for education are within a very complex problem. The University, in dealing with one small part of the problem, is vitally interested in contributing to the professional growth and development of the educators in the school systems of Virginia, West Virginia and Maryland. The University is equally interested in remaining current on educational practices in the schools. These objectives have encouraged the University to recognize that reform is a two-way street providing opportunity for the schools and the university to improve. Our experiences tend to reveal that:

1. Schools respond well to being an equal partner in graduate education.
2. Schools are comprehensive and need comprehensive programs to meet their needs.
3. The focus should be on leadership within the classroom, school and system.

4. The program must seek to instill the value of continuous study through action research, thereby stimulating ongoing school improvement as well as individual professional development.

5. The University faculty system is improved as a result of the cooperative arrangement with the public schools.

6. The University is receiving valuable information and guidance on future programs and services.
7. The Cohort Concept And System Is A Viable Delivery Method That Encourages Extended Growth And Development Among The Cohort Members.

Shenandoah University is pleased to contribute as well as grow from its partnerships with the public and private schools of our region. Our experiences confirm Clark and Astuto's contention "If there is to be authentic reform in American education, it must be a grassroots movement" (1994, p. 520). We are confident that even greater opportunities for mutual benefit lie ahead both nationally and internationally.

References

Clark, D. & Astuto, T. (1994). Redirecting reform: challenges to popular assumptions about teachers and students, Phi Delta Kappan, 75 (7), pp. 513-520.

Cochran-Smith, M. & Lytle, S. (1993). Inside, outside: teacher research and knowledge. New York: Teachers College Press.

Corey, S. (1953). Action research to improve school practice. New York: Teachers College, Columbia University.

Johnson, B. (1993). Teacher-as-researcher (Report No. EDO-SP-92-7). Washington, D.C.: Office of educational Research and Improvement. (ERIC Document Reproduction Service No. ED 355 205.

National Commission on Excellence in Education. (1983). A nation at risk. Washington, D.C.: U.S. Government Printing Office.

Richardson, V. (1994). Conducting research in practice, Educational Researcher, 23 (5), pp. 5-10.

THE ROLE OF HIGHER EDUCATION IN FOSTERING LIFELONG LEARNING PARTNERSHIPS WITH TEACHERS

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'The ability to collaborate on both a small and large scale is becoming one of the core requisites of postmodern society' (Fullan 1993, p 14)

Teachers' work in schools is changing. Over the last twenty years, governments across the world, for motives which have more to do with socio economic than purely educative factors, have intervened more directly in the curriculum and government of schools and the conditions under which teachers work in attempts to ensure that work in schools is relevant to the needs of the nation, with implications for the training and continuing professional development of teachers This paper seeks to explore some of the challenges and threats which this poses for teacher educators. It proposes that the roles of teacher educators themselves will need to change in order to rake account of the new world to which teachers themselves must adapt. It will discuss the implications *of* these for practice; and it will propose particular models of research and development which will enable the contributions of those in higher education to the continuing professional development of teachers to remain significant.

In simple terms a partnership is 'the relation which subsists between persons carrying on a business in common with a view to profit' (Partnership Act, 1980). In other words partnerships are usually formed because each of the partners has something to offer to the joint enterprise which is different from but complements that which is offered by the other partners. There are, of course different kinds or forms of partnership. In law, for example, there are 'senior' and 'junior' partnerships. In some businesses there are 'silent' partners; and in all fields there are partnerships based upon equality or principles of equity. There are also 'temporary' partnerships called coalitions. These are entered into for specific time periods, often in order to solve a problem which is common to the partners. Once a satisfactory outcome has been achieved, the coalition ends. I will be suggesting that universities are more suited to some of these partnerships and coalitions than others.

The Need for Lifelong Learning

One certainty, that we may predict for the 21st century is that times will not become more settled. The sense of 'fragmentation breakdown and loss of meaning which pervades post-modern cultures' (Beare and Slaughter, 1993, p, 15) is likely to continue. In a context of 'compulsive technological dynamism, competitive individualism' and a radical loss of meaning and purpose, schools are in an impossible position, standing as they do at the crucial interface between past and future, charged both with the conservation of culture and with its radical renewal'. (Op cit)

There is no doubt that Lifelong Learning for All' will be an established part of everyone's agenda for the 21st Century. The E.C. declared 1996 the 'Year of Lifelong Learning'; UNESCO will enter the third millennium with a new interdisciplinary project, 'Learning Without Frontiers', in which the establishment of a culture of learning is the main focus. In the words of its Director General, Dr. Frederico Mayor, 'the purpose of learning can no longer be regarded as no more than an initial preparation for the remainder of one's life. Learning in the twenty-first century will be a continuous requirement. It will be the responsibility of societies to provide an environment, free of any barriers, in which individuals and social entities alike can satisfy their learning needs'. This theme is being echoed across the world in statements by governments, industrialists and educationists alike. Yet, according to the European Round Table of Industrialists' report on lifelong learning, at present, 'education has the lowest level of capital investment of any major industry today'.

Schools and universities have a particular role to play within this theme, for they will be in rather than of what we now recognise as the knowledge society. Because they represent societies' means of influencing through the transmission of knowledge, values, skills and attitudes, they need to have a vision of future society based upon an understanding of the worlds in which their students live, their learning needs and the demands of society and the world of work; and they need to be filled with teachers who encourage children to want to learn, to achieve, to treat the world as a land with limitless horizons.

'In the knowledge society people have to learn bow to learn . . subjects may matter less than the students' capacity to continue to learn and their motivation to do so. Post-capitalist society requires lifelong learning. For this we need a discipline of learning. But life-long learning also requires that learning be alluring, indeed, that it becomes a high satisfaction in itself if not something the individual craves ...' (Drucker, 1992, p.183)

The challenge of lifelong learning is that it requires people to start right from their earliest years at school, and for a love of learning to be nurtured by their teachers - so often a feature in descriptions by adults of their 'best teachers' who are completely dedicated to the job, have a 'passion for the excitement of the intellectual life' and whose 'greatest satisfaction' is to share it with their students, as with children, so with teachers the key to successful learning is motivation.

The Challenge for Teacher Educators

The challenge for teacher educators is to produce, first and foremost, the kind *of* teachers who are experts in effective learning 'with the capacity to think deeply about educational aims and values, and thereby critically about educational programmes ... willing to motivate and encourage each and every pupil, assess progress and learning needs in their widest sense, even when this involves Them in areas outside formal education' (NCE, 1993, p 196-7).

A different way of expressing this is that teacher educators must produce teachers who see their own learning as being lifelong.

'Initial teacher education can be no more than a preliminary to the professional development required both for specific career routes within teaching and for the continuous development required of a professional' (7.4) .... 'Static or linear conceptions of teacher education must be replaced by a holistic understanding of the of personal and professional development with research and development, school improvement and the changing social and political aspirations for the education service and by an appreciation that a dynamic system will challenge existing organisational structures and power bases and require responsiveness to the needs of the practitioners'. (7.12) (Doc.4c1994 ETUCE)

The creation of personal development planning support mechanisms over a career which involve opportunities for both the enhancement of job skills and the development of personal and organisational vision are not simply desirable for teachers in the twenty first century. They are essential to develop schools. We must be prepared to develop teachers; and we must know what this involves. It is one thing to analyse needs, and create policies; it is quite another to develop strategies for improvement. Professional development opportunities provided by teacher educators must provide support for classroom pedagogy that goes far beyond the mechanics of teaching. They must provide 'generalizable principles of teaching, subject-specific instruction, sensitivity to the pervasive human qualities and potentials always involved'. (Goodlad, 1990, pp.49-50) This kind of sensitivity requires teachers (and teacher educators) who are committed and are able to reflect critically upon their practice both alone and through collaboration with others

Promoting Reflective Practice

The history of research concerning teacher development, is that teachers have not generally taken an active part in the production of knowledge about their own teaching - indeed there teas been a tension between so-called 'scientific' knowledge (theory) produced in the universand professional or practical knowledge (practice) produced in the school. Because teachers are perceived as basing their practice on their professional, practical knowledge and experience, they: are cut off, then, both from the possibility of reflecting and building on their own know how and from the confusions that could serve them as springboards t new ways of seeing things.' (Schon 1992, p.119)

The 'reflective practitioner” has become a “buzz word' in the education of teachers and needs to be unpacked. There is a continuum within which there are 'levels' of reflection which require more, or less, thoughtful exploration by teachers. (Elliott 1991, Grundy 1994). Reflective and non-reflective practitioners do not exist as two fundamentally irreconcilable groups. I have noted elsewhere that reflection is a necessary but not sufficient condition for learning. Confrontation by self or others must occur. And for this to be effective, these others must be skilled, trusted colleagues who are knowledgeable about and experienced in reflection in, on and about the action and who are suwithin a culture of collaboration and a leadership which is prepared to deal positively with the very real constraints of time and the control ethos of bureaucracy. (Day, 1993).

Opportunities and motivation for considered professional discourse about teaching with colleagues are also more or less limited by both the culture of the school (Little, 1990; Schein. 1985) the rhetoric/reality roles played by teachers as educationists and teachers as practitioners (Keddie, 1971); and the personal and professional histories of the teacher. These and the privacy norms which, even now, are characteristic of the professional serve to undermine or diminish the capacity for teacher learning and sustained professional development (Rosenholtz, 1989, McLaughlin and Marsh, 1979).

Research tells us that teachers working alone in classrooms are likely to operate on models of restricted professionality Once they have developed a personal solution to any problems of teaching which they perceive - and this is usually achieved without any systematic assistance by others it is unlikely that this solution will he significantly questioned again. (Day, 1985). Argyris and Schon, who investigated the work of people in several professions, including teaching, nearly twenty years ago characterised this 'normal' world of learning as 'single loop' in which, ' we learn to maintain the field of Constancy designing actions that satisfy existing governing variables'. (Argyris and Schon, *1976)*. In other words, under the normal conditions which exist in most schools teaching becomes a means of control, not development Promotion of this kind of learning is prevalent in cultures which discourage systematic self and peer review of thinking, planning and practice. Even the presence of, for example, formal systems of performance review (appraisal) and school development planning does not, in itself, guarantee the development of learning cultures. More importantly, the seeds of single loop learning are embedded in the many training courses for teachers which teach self-reliance and self-sufficiency and in school cultures where collaboration and the sharing of problems and issues may be seen as signs of weakness.

The 'means-ends' models of training, implicit in school based apprenticeship models of initial training may reduce the attention paid to critical reflection as a means of learning even further. Not only this, but they will work against the development of productive partnerships which integrate and extend the purposes, concerns and stalls of those whose principle role it is to take critical overviews of the teaching and learning communities and the contexts in which they operate with those skilled classroom practitioners whose principle role is to teach children and young people. There is a need to assert the unique complementarily and roles in and between purposes of schools and departments of education in the education of teachers

Cultures of collaboration must begin at the pre-service stage, be sustained throughout teachers' careers, and must be led by teacher educators who themselves are 'reflective practitioners', lifelong learners, and to have a vision of the kind of teacher needed for the pupil, school and society.

Resolving the Scholar-Practitioner Dilemma

In his presidential address to the American Educational Research Association's Annual Conference (Chicago' 1991), Larry Cuban spoke of the usefulness of research as perceived by those outside the academic community and of his own dilemma as one who had practised' in the schools system and 'researched' as a scholar in higher education. He called for more networking in the 1990s between educational communities of all kinds, and for the establishment of caring communities which would move beyond what is still for many outside academe the rhetoric of collaboration. In highlighting the scholar-practitioner dilemma, he echoed the concern of this paper of the alienation or at best the worldwide scepticism expressed by teachers about research and researchers which is so unproductive. The following year in her presidential address, Ann Lieberman ((1992) focused upon the need 'to create a community that educates all of us those in the university and those in the schools a community that expands our relationships with one another, and, in so doing, our knowledge and our effectiveness'.

Writing in the context of pre-service teacher education in America, Chris Clark has suggested that there are three ways to characterise the relationship between research on teaching and teacher education. (Clark, 1989). First there is no relationship. Here, researchers distantly pursue their own narrow and parochial interests publish in obscure language in obscure journals, and avoid all discussion of practical implications of their work. For their part, teacher educators (and teachers) see this kind of research as irrelevant and impossible to understand, and continue to use 'unexamined habits and traditional ways of preparing teachers'. The second kind of relationship is a 'top down' model in which teacher educators pass on knowledge gained second hand from researchers to their students. Here there is a bifurcation between research, teacher educators and teachers. Clark proposes a third kind of relationship in which, 'members of the research community behave as consultants to the community of teacher educators . a more humble and service-oriented role for research on teaching in relation to teacher education; a relationship in which researchers provide food for thought responsive to the perceived needs of teacher educators'. (Clark, 1989, p.307) There is, however, a sense in which even this preferred model is limited for it introduces a different kind of hierarchy, conceiving implicitly of teacher educators as 'novice' researchers, at best involved ID 'applied' research programmes of their own.

Michael Eraut presents a compelling case for reconceptualising the relationship between higher education and the profession. In doing so, a fourth model presents itself which closely fits the purposes of teacher educators and in which they can be full participants.

> 'The barries to practice-centred knowledge creation and developments ... arc most likely to be overcome if higher education is prepared to extend its role from that of creator and transmitter of generalisable knowledge to that of enhancing the knowledge creation capacities of individuals and professional communities. This would involve recognising that much knowledge creation takes place outside the higher education system, but is nevertheless limited by the absence of appropriate support structures and the prevailing action-orientation of practical contexts ... (Eraut 1994, p.57)

He goes on to suggest the need for closer relations and joint responsibilities for knowledge creation, development and dissemination. suggesting collaborative research projects, problem-oriented seminars for groups of researchers and mid-career professionals and jointly planned programmes focusing up reflection on experience and this, 'escape' from it.

School-university learning communities are not new. There are many examples of individual collaborations in response to research-led and practice-led initiatives. The worldwide action-research movement which essentially embodies teacher-school-university partnerships for improvement, was born formally in England in 1978 through the foundation of the Classroom (now Collaborative) Action Research Network. Four years ago it launched the International Journal of Educational Action Research, of which I am privileged to be co-editor. A look through its pages demonstrates the considerable partnership activities between universities and schoolteachers. Examples of school-university partnerships may also be found in America (Hollingsworth, 1989), Canada (Fullan, 1992), England (Day, 1985) and The Netherlands (Jensen et al 1995). with individual teachers, departments, schools and consortia of schools In recent years, however, there have been calls for the development of systemic 'improvement' related initiatives both by academics and governments.

In England,government has intervened to ensure that schools have a more significant role in teacher education through its imposition of school-based pre-service programmes and now every education department teas its 'Partnership Committee'. This has created challenges to the traditional 'schoolteacher' and 'university teacher-educator' roles which have yet to he fully resolved. In America, too the Holmes Group has emphasised the need for teacher education schools to strengthen their links with teachers through'Professional Development Schools' in which wide-ranging collaborative professional development work may occur (Holmes Group, 1990, 1995). Whilst its proposals have been much criticised by academics for their failure to recognise the negative effect on the current educative breadth of research and development at post-graduate level, and its narrowing of the pre-service curriculum (Labaree and Pallas 1996), it is, nevertheless, only one example of government intervention aimed at ensuring that universities' work is more directly related (in a utilitarian way) to government defined needs. In England, a government quahog, the Teacher Training Agency, has recently been established to coordinate and control the direction of curriculum and training at pre and post-experience phases, and to disburse funds appropriately, essentially 'hijacking' the professional development agenda from the professionals.

Both of these Major initiatives are examples of ways in which the work of the education community as a whole is seen to be related more closely to government economic and social and employment policies than previously. As with all systemic change, research clearly indicates the need to conceptualise change as 'process' rather than 'event', and thus to recognise that it is not entirely rational. Those leading change in learning communities must ensure that the 'players' (a) are convinced of its merits; (b) feel a sense of ownership through participation in processes of decision making and (c) have the support necessary to change,

The final part of this paper focuses upon four different kinds of partnerships:

Learning Partnerships

1. Teaching through Critical Friendship Partnerships

In America, Hugh Sockett describes 'four primary' principles for the government *of* Masters level degree programmes designed to build a professional community of reflective practitioners, which he proposes as the core of professional development for mid-career teachers:

1. Practitioners must frame and set the problems.
2. The focus must be on the predicament of the unique case and its susceptibility to change.
3. Tacit knowledge and understanding must be acknowledged and described if possible.
4. Academic-practitioner relationships should be defined as coach-practitioner relationships (Sockett, 1993, p.44)

The 'coach' analogy is an interesting one which Sockett explores a little further:

'For the academic to be a coach does not imply that he or she could do the practical job of teaching children better than the practitioner, for this is not a master-apprenticeship relationship. The coach usually bangs experiences, ideas, and *insights* into a cooperating relationship'. (Sockett, 1993, p.48).

The 'coach' role should not be confused with clinical supervision or mentoring since it is founded upon the principle of equity, a negotiated relationship between equals. Indeed, it may be more accurate to describe the relationships rather than the roles as, 'critical friendships'. These may be defined as practical partnerships entered voluntarily, based upon a relationship between equals (distinguishing them from the pre-service mentor relationship) and rooted in a common task or shared concern. They can be a means of establishing links with one or more colleagues from inside or outside the school as well as assisting in processes of learning and change so that ideas, perceptions, values and understandings may be shared through the mutual disclosures of feelings, hopes and fears. Critical friendships can serve to decrease isolation and increase the possibilities of moving through stages of reflection to confrontation of thinking and practice. Reflection in itself will not necessarily dead to self-confrontation (Day, 1993) and self-confrontation will need skilled support to be translated into new action.

2. Made to Measure Consultancy and Accreditation

Partnerships between higher education institutions and schools have existed in the past particularly in connection with consultancy and placements for pre-service students' work experience. Such activities were often based on Mutual goodwill, personal relationships and contacts built up over time through involvement in professional networks. However, they were frequently ad hoc, and involved a limited number of higher education staff and teachers. The development of schemes for the integration of the assessment and accreditation of work-based learning into higher education courses will require closer cooperation between schools and higher education institutions and on a much larger scale. Whilst existing working relationships provide a basis on which future collaboration can be established they do not necessarily offer models on which to build future partnerships.

Examples of good practice with regard to the formation of partnerships between higher education and schools for the promotion of lifelong learning and continuing professional education already exist. These provide a number of models on which collaboration for the further development of schemes for the academic assessment and accreditation of school-based learning might be based. They include:

- Direct sponsorship by a school (or group of schools) of a course or course module to address apaticular need e.g. to meet a skill shortage or provide knowledge updating. In this case the higher education institutions 'bespokes' the services it provides to meet its client's expressed needs.
- Leasing arrangements whereby an employer (or a consortium) pay a 'hire charge' to a higher education institution to provide a service from its existing 'product range' e.g. the delivery of a course or course module to company employees at one of its training centres at a time which fits in with business needs.
- Franchising agreements by which a higher education institution allows courses or course modules delivered by further education or tertiary colleges or 'in-house' by a school to be given credit towards one of its qualifications. Under such arrangements the higher education institution monitors the design and delivery of the course and the assessment of the learning outcomes in order to give quality assurance and safeguard the standing of its awards.
- The formation of consortia by higher education institutions and schools in order to make maximum use of the available resources and to ensure the highest quality provision of services at the lowest cost toany individual member of a consortium.

Learning contracts will be tailored to individual needs, and will differ in their formality. They may be simple or complex, long term or short term, verbal or written. They are, however, essential, for they provide a recognition and reminder that teacher development is not the sole responsibility of teacher, ... it is not sufficient for education systems to 'pass the buck' for educational improvement to teachers ... we need to understand that responsibility for the quality of education is also a matter for the school, not just the individual teacher ...' (Grundy, 1994, pp.24-5)

3. Collaborative Action Research Partnership

'Despite the so-called revolution in teacher research around the world today there is a lot of talk about teachers as producers of knowledge ..., a view of educational research is still dominant among classroom teachers that sees research as an activity conducted by those outside the classroom for the benefit of those outside the classroom ... and educational theory as what others with more status and prestige in the academic hierarchy have to say about them and their work ...' (Zeichner, 1995, p.154)

A third kind of partnership is that of collaborative action research. Put simply, action research is 'study of a social situation, involving the participants themselves as researchers, with a view to improving the quality of action within it' (Somekh, 1988, p 164). Because it is action oriented and linked to change if may be an attractive option for teacher educators. Moreover, it may be carried out at different levels, so that, whatever the experience of the researchers or would-be researchers, it can contribute both to their growth and to the growth of others. It can be, in effect, a guiding link between the role of the so-called practitioner (teacher in school) and so-called researcher (university lecturer).

What action research does in the context of teacher education is develop joint responsibilities for knowledge creation to enable teacher educators to address directly their concerns with the praxis of schoolteaching and the theory-practice dialectic, as part of their essential core task of contributing to teacher improvement. It is as a change process that action research may be distinguished from other forms of qualitative inquiry. It challenges:

i) the separation of research from action
ii) the separation of the researcher from the researched
iii) assumptions about the control of knowledge
iv)assumptions about the nature of educational reform

(Grundy 1994 4 28-9)

Collaboration of this kind is not easy It demands the establishment and maintenance of long term relationships which are at the very least co-equal in which teacher educators student teachers and teachers are 'active agents in the production of a new pedagogic discourse rather than merely the consumers of the professional knowledge produced by academics and educational researchers' (Edwards and Brunton 1993 p 156). Problems of this form of practitioner research being 'colonised' by higher education academics have been identified. (Elliott 1991) However it does potentially offer teachers the opportunity to engage in professional development through systematic investigation of practice with the help of a 'mentor' or critical friend from inside or outside the school which otherwise might not be available. Clearly however dependence and autonomy and roles and relationships need to be addressed.

This is perhaps the most complex lifelong learning partnership to foster and sustain since to some academics partnerships of this kind May represent new restrictions upon choice of and conduct of research. They may well have a case and there should always be room for what Elliott (1989) terms the production of 'knowledge about education' - propositional knowledge as represented by academic research communities as well as educational knowledge' - practice knowledge generated by teacher and researcher through reflection on practice. Nor is this kind of work without cost. It can be labour intensive and requires of the actors technical and human relationship skills far beyond those necessary in more traditional research. Furthermore, the establishment of any working relationships must take account of existing cultures both within schools within universities and between schools and universities. For example a world which emphasises the systematic gathering of knowledge formal examination of experience professional criticism and seemingly endless discussion of possibilities rather than solutions is likely to contrast sharply with a world dominated by action concrete knowledge and busyness. (Day 1991 p.537 Cuban 1992 p.8). The disenabling effect of the two task cultures upon long term relationships should not be underestimated. This still relatively young discipline requires also a quite different 'mind set' by those who engage in it from that needed in most other research.

Endeavours. Since it is focused upon improvement, and, therefore, change, it demands

i) relationships between 'researcher' and 'researched' to be equitable;

ii) the possession of human relating, negotiation and technical skills and an ability to engage in collaboration which is not always comfortable. Communities on occasion experience a great deal of discomfort Indeed, collaboration really means 'to toil together, often under conditions of distress or trouble';
iii) an understanding of change processes;
iv) a willingness to reflect upon and open to others the researchers own values - a move from single to double loop learning;
v) a willingness to service teachers' agendas rather than impose ones own;
vi) A belief that authentic settings are best researched by those practitioners experiencing them direct, but that outsider viewpoints may enrich these through challenge and support; and
vii) an acceptance that those affected by planned changes have the primary responsibility for deciding on courses of action which seem likely to lead to improvement, and for evaluating the results of strategies tried out in practice'.

4. Networks for Learning

In 1996, the European Commission published its White Paper, 'Teaching and Learning Towards the Learning Society' which puts forward guidelines for action in the fields of education and training. It suggests the necessity for cooperative partnerships between school and family school end lousiness, and might have added schools and universities. It proposes that 'the challenge of cooperation between education establishments and enterprises (schools) ... is to accept ... (them) ... as full partners in the training ... (education) ... process (p 16): and it recommends the notion of 'sustained flexibility' as a necessary condition. Writing in a school development context, Michael Huberman (1995) proposes research-based, cross-school networks, 'with a focus on bridging the gap between peer exchanges, the interventions of external resource people, and the greater likelihood of actual change at the classroom level' (p. 193). Figure 1 illustrates the ways in which an individual network of schools can work together and take advantage of the particular expertise which exists in the academy:

This network in action combines the opportunities for self direction by schools with external intervention from universities at particular stages. The specific and temporary intervention roles make use of the special professional research content knowledge and skills held by those in the academy. Whilst many networks exist it is as yet rare to come across those which are self sustaining. Yet the vision of sustained interactivity must underpin the work of all education departments.

In order to operationalise critical friendships, consultancy, action research and networks of this kind universities and schools will have to engage in 'contracting'. This is not intended to be a legalistic process. 'Agreements' (a softer more human word than contracts) are of course, often made informally between teachers and increasingly now more formally under 'school development plans'. Many teachers will have experienced the value of being able to share thoughts practices and feelings with one or more trusted colleagues. The importance of agreeing contracts is such, however, that it may be necessary to document them for use aides memoir. Written or at least explicit verbal contracts can do much to clarify mutual expectations as to goals and methods In other words the contract needs to he explicit:

- The contract should be negotiated not proclaimed by the partners involved
- The contract should be clear to all involved parties.
- Some kind of oral or written commitment to the contract should be obtained
- The contract should be reviewed as the parties progress and revised if necessary.

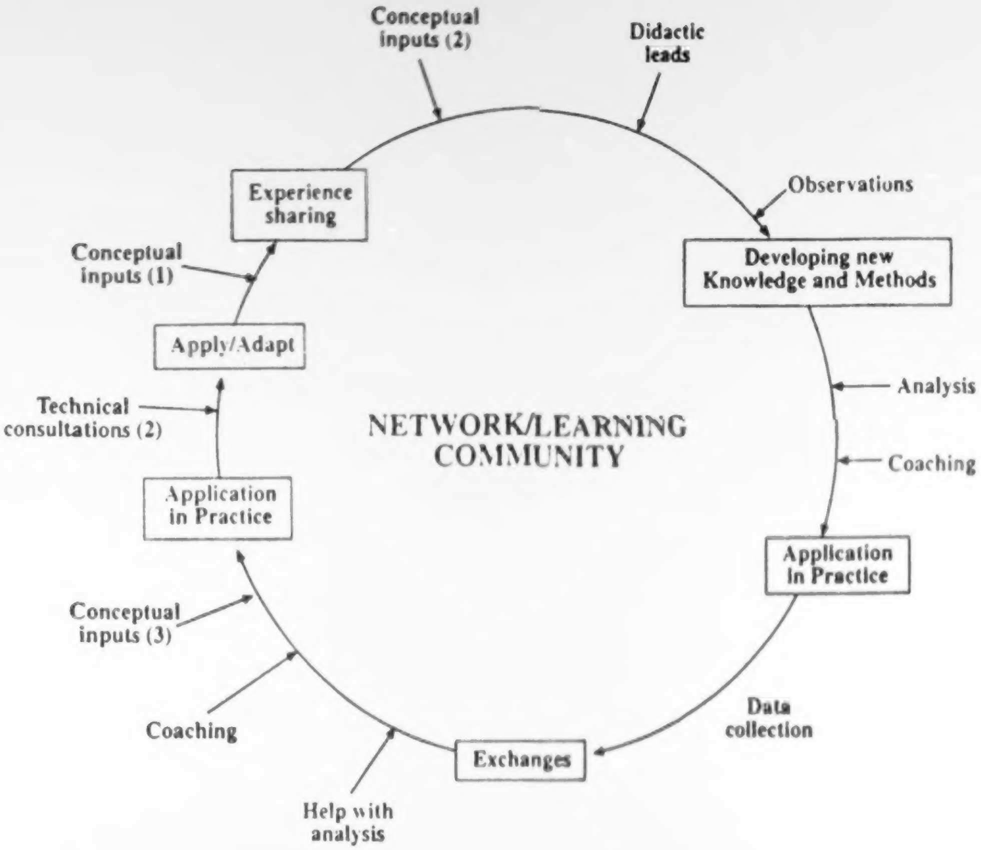
Conceptual inputs (2)
Didactic leads
Observations
Experience sharing
Developing new Knowledge and Methods
Conceptual inputs (1)
Apply/Adapt
Analysis
Technical consultations (2)
NETWORK/LEARNING COMMUNITY
Coaching
Application in Practice
Application in Practice
Conceptual inputs (3)
Data collection
Coaching
Exchanges
Help with analysis

Figure 1: How Learning Communities Learn: A Network in Action

In the kinds of learning partnerships which I have described, the responsibility of universities is to connect their own particular interests to those of the communities which they serve, and to work alongside rather than apart from policy makers teachers' associations parents governors schools and teachers - even government agencies - not as supplicants' but neither as strangers, seemingly distant from or disinterested in the worlds in which our potential partners live.

The competencies we then need as professionals must include the competence to cross borders' cultures and dialects thelearning and translating of multiple languages (the political the everyday, the academic) and the courage to transgress when faced with social injustices. How we practice our authority is then the issue, not what we claim or profess: if we believe in something, then we have to practice it.' (Walker, 1996).

CONCLUSION

Successful models of lifelong learning partnerships between universities and schools for the 1990s and beyond must assert connections between thinking, learning planning and practice through self-generated, supported reflective work, at a number of levels, which is perceived as relevant by both parties which is appropriate to both parties' lifelong developmental needs as well as those of the organisation and which is shared and enhanced through appropriate intervention which challenges and supports. Researcher-developers from higher education have a key role to play in this, as do

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collaborative school cultures which build and develop strategies for challenge and support within the notion of teacher autonomy. Both recognise the need for teachers, within clearly defined frameworks of external accountability, to retain a high degree of control over the direction of their work and the confidentiality surrounding their contributions, whilst at the same time having access to appropriate critical support.

There remains in the minds of politicians and teachers a perceived theory-practice, theoretician problem; a separateness between those who work in schools and those who work in higher education, between those who are said to practice and those who are said to theorise. Whether we like it or not, this exists partly because of history and partly because of function - after all, few teachers in schools have time built into their work which allows them to reflect, theorise research and write. It also exists within higher education, I suspect partly out of habit. Teachers who become teacher educators have for years wrapped around themselves the cloak of busy practicality which has served to comfort and insulate them against change. The separation thus exists because many have implicitly encouraged or colluded in this. There is a consciously calculated protective 'mystique' surrounding 'theory' and 'research'. How, then, are these two groups of relative and alienated strangers going to connect? Certainly there will need to be a change in attitudes and relationships. Recent legislative changes in England, Holland, Sweden, and elsewhere in Europe, Australia and North America have provided opportunities (though perhaps not internationally' for new relationships to be formed between higher education and schools.

My own view is that there will always be a creative tension in the alliance between teachers and academics who are committed to developing roles across and education. Thus notions of emancipation and empowerment of teachers (Stenhouse, 1979); the recognition of a need to develop a new language for communication between teachers and academics (Nias, 1991); and the establishment of self critical, self-reflecting communities (Handel, 1991), whilst attractive, depend for their fulfillment upon the willingness, social skills and abilities of participants to create and negotiate contracts, either collectively or individually, which are based on forms of critical friendship.

In the partnership models of research and development which I have described the work does not belong to any one individual or one interest group. It is jointly owned by each of the participants. The voices of both are listened to and heeded. It is a partnership in which teachers and significant others are actively involved in negotiating processes and outcomes; and the power relationships of co-operation' rather than collaboration are avoided. (Erickson and Christman, 1996, p 150). The key role of the academy is to promote and sustain an environment which provides challenge and support through research which is embedded in development. Teacher educators are, in a sense, interventionists who mm to seen questions which are perceived by the teachers as relevant to their needs, to investigate answers to these questions collaboratively and to place the onus for action on the teachers themselves.

The creation of community takes time and is not always easy. There will always be individuals and groups whose individual or collective vested self interest may not be served by this. In the process new knowledge and skills will need to be developed and tentative steps to change supported. This will not always be easy, and it may make new demands on busy professionals. But it is within this shared landscape that the future partnership work of schools and universities in their own lifelong development can be seen as making sense, and being fit for purpose. It is within this landscape that higher education can play its part in the challenge of supporting the lifelong learning of teachers.

Note 1

When power and prestige are unequal 'collaboration' can easily result in 'co co-operation or even in domination masked by a euphonious label' (Erickson and Christman, 1996).

eg.: Control over agenda of research
Control over conduct of research
Control over interpretation of research
Control over dissemination of research

References

Argyris C & Schon D A (1974) *Theory in Practice increasing professional effectiveness New* York, Jossey Boss.

Beare H and Slaughter R (1993) *Education for the Twenty-First Century London* Routledge

Clark C (1989) Asking the Right Questions about Teacher Preparation: Contributions of Research on Teacher Thinking in Lowyck J and Clark C M (eds.) *(1989) Teacher Thinking and Professional Action* Studia Paedagogica, Leuven University Press, Leuven Belgium, pp305-323

Cuban L (1992) Managing dilemmas while building professional communities, *Educational Researcher, 21,* pp.4

Day C (1985) Professional Learning and Research Intervention: an action research perspective, *British Educational Research Journal,* Vol.11 No.2, 1985, pp133-151

Day C (1991) Only Connect: relationships higher education and schools, schools K H K Letiche van van Wolfe and F X Plooij (eds.) The *Practitioner's Power of Choice in Staff Development and In-Service Training* Amesterdam Swetz and Zeitlinger

Day C (1993) Reflection: A necessary but not sufficient condition for professional development, *British Educational Research Journal* Vol.I9 No.1 1993

Drucker P F (1992), *Post-Capitalist Society* London, Butterworth-Heinem~nn Ltd. Elliott j (1989) Educational Theory and the Professional Learning of Teachers: an overview, *Cambrdige Journal of Education, Vol. 19,* No. 1, p.84

Elliott J (1991) *Action Research for Educational Change,* Buckingham Open University Press Eraut M (1994) *Developing Professional Knowledge and Competence* London, The Falmer Press

Erickson F and Christman J B (1996) Taking Stock/Making Change: Stories of Collaboration ID Local School Reform, *Theory in Practice* Vol.35. No.3. Summer 1996, pp.l49- 151

ETUCE (1994) *Teacher Education on,* Document 4c (point 5c) Luxembourg, Center Jean Monnet

Fullan M (1992) *Successful School Improvement* Buckingham, Open University press

Fullan M (1993) *Change Forces,* London, The Falmer Press

Goodlad J I (1990) *Teachers for our nation's school San* Francisco, Jossey-Bass

Grundy S (1994) Action Research at School Level, *Educational Action Research,* Vol.2 No. I, pp.23 - 37

Handal G (1991) Promoting the articulation of tacit knowledge through the counseling of practitioners, in: KLetiche J C van der Wolf & F X Plooij (eds.) *The Practitioner's Power of Choice in Staff Development and in-service Training,* Amsterdam/Lisse Swetz & Zeitlinger

Hollingsworth S (1994) *Repositioning the Teacher in U.S. Schools and Society Feminist Readings of Action Research.* Keynote Address to the Thirteenth International Conference of the Collaborative Action Research Network, University of Birmingham, April 1994.

Holmes Group (1990) *Tomorrow's Schools,* East Lansing, Ml: Holmes Group

Holmes Group (1995) *Tomorrow's schools of education East* Lansing, Ml: Holmes Group

Huberman M (1 1995) Networks That Alter Teaching: conceptualizations, exchanges and experiments, *Teachers and Teaching. tand practice,* Vol. l, No.2, pp. 1 93-210

Jansen B. Reehorst E & Deltaas R (1995) Networking and Environmental Education: a challenging strategy for school renewal, *Educational Action Research,* Vol.3 No.2, 1995

Keddie N (1971) Classroom Knowledge, Young M F D (ed.) *Knowledge and Crontrol,* London, Collier Macmillan

Labaree D F and Pallas A M (1996) Dire Straits: The Narrow Vision of the Holmes Group, *Educational Researcher,* Vol. . 25, No.4, pp. 25-28

Lieberman A (1992) The meaning of scholarly activity and the building of community, *Educational Researcher,* 21(6) 5-12

Little J W (1990) The persistence of privacy: autonomy and initiative in teachers' professional relations. *Teachers College Record 91* (4): 509-36

McLaughlin M W and Marsh D (1979) Staff Development and School Change, in Lieberman A and Miller L (eds.) (1979) *Staff Development New Demands, New Realities New Perspectives,* New York, Teachers College Press

National Commission of Education (1993) *Learning to Succeed,* Report of the Paul Hamlyn Foundation, London, Heinemann Ltd.

Nias J (1991) How practitioners are silenced, how practitioners are empowered, in H K Letiche , C van der Wolf & F X Plooij (eds.) The *Practitioners's Power of Choice in Staff Development and In-service training,* amsterdam/Lisse, Swetz & Zeitlinger

Rosenoltz S J (1989) *Teachers' Workplace: The Social Organisation of Schools,* New York: Longman

Schein E H (1985) *Organisational Culture and Leadership, San* Francisco, Jossey Bass

Schon D A (1992) The Theory of Inquiry: Dewey's Legacy to Education, *Curriculum Inquiry,* 1992, pp.1 19-139

Socket H (1993) *The Moral Base for Teacher Professionalism,* Columbia University, Teachers College Press

Somekh B (1988) Action Research and Collaborative School Development, McBride R (ed.) The *In-Service Training of Teachers,* London The Falmer Press

Stenhouse, LA (1979), Research as a basis for teaching. In L A Stenhouse (1983) *Authority, Education and Emancipation,* London, Heinemann Educational Books, cited in Rudduck (1995) op cit

Walker M (1996) 'Sublutern' Professionals: Acting in Pursuit of Social Justice, *Educational Action Research* Vol.3 No.3

Zeichner K M (1995) Beyond the Divide of Teacher Research and Academic Research *Teachers and Teaching: theory and practice* Vol.1 No.2, 1995, pp.153 – 172 Dec.96.

THE PARTNERSHIP BETWEEN CHAPMAN UNIVERSITY-COACHELLA CAMPUS AND THE COACHELLA VALLEY UNIFIED SCHOOL DISTRICT: A LESSON IN SCHOOL REFORM, RESOURCE ALLOCATION AND ETHICS.

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Educational ministries in wealthier nations in contrast with ministries in poorer nations, generally spend more time and money developing instructional programs for their youth. However, even nations with a plethora of resources can not provide for the myriad of services that all children need to become competent, literate. Healthy and well adjusted adults. Therefore it stands to reason that all nations should be examining new ways to serve their children in light of scarce fiscal and personnel resources .

In the United States, the current, the wave of school reform emphasizes the importance of developing interagency resources to meet the multitude of needs for American youth.

The United States faces a major stumbling block that may not be apparent in developing countries. Essentially, Americans are burdened with a deeply entrenched bureaucratic model of schooling that is quite resistant to almost all changes suggested by those in the movement to reform education.. Over 1% of the U. S. population are employed by the teaching industry. A substantial number of Americans also work in jobs that are tangentially related to education (i.e. think tanks, universities and the publishing industry). These persons may not want to change the status quo because they fear that their jobs might be reallocated or redirected. Compounding this problem is the fact that educational establishments are operated under separate jurisdictions that other agencies that serve children and youth. For example, in Palm Springs, California, the local school district is governed by an elected Board of Education that sets policy for the district. When the School Board decides that it would like to involve the local health department in a joint project, the Board members soon find out that the local health office is not governed by an elected board. Policy is set at the local health office by State of California employees who work for the Riverside County Dept. of Health.

Although an essential component of School Reform is collaboration between and amongst various governmental agencies, the current structures and lack of common jurisdictions make it all but impossible to mandate cooperation and collaboration between educational and social service agencies. There are also many restrictions placed on local school systems regarding "privatization of services". Most districts frown on using private services for a public entity, like a school system.

School boards are quite frustrated with all these constraints to change and reform. In the absence of any realistic attempt to realign governmental jurisdictions and beauracarcies, districts are turning to Colleges of Education as mentors or private consultants to work behind the scenes to help effect change. That alliance is exciting but it comes with some very important caveats. The Colleges of Education, although not governed by the school districts, do have to offer curriculums that pass muster with the State Dept. of Teacher Credentialling Office. So, in actuality, although the Colleges are free to offer any curriculum that their boards agree upon, they will not get many students matriculating unless they offer an expedient way to get a teaching credential in the state in which they are located.

The main body of this paper will now describe and analyze one such alliance between a local school system and a private College of Education . While the major barriers to collaboration may be readily apparent, this author was surprised at the many unanticipated obstacles to collaboration that kept surfacing. A discussion of these "hidden" obstacles will be instructive to educators who are attempting to forge School district/University alliances.

Government officials, human service personnel and educators are in agreement that the need of children and families are too diverse and complex to be adequately met by any one agency.

Model programs to address the multitude of these needs are commonly referred to as collaborative human service programs, comprehensive services or school linked services. These endeavors have been traditionally funded through federal, state and private sources and have met with mixed success. A cross cutting concern among the program evaluators is the difficulty stakeholders face in trying to sustain long term fiscal and personnel commitments to the collaborative planning processes and programs once the funds dry up and the initial enthusiasm wanes. The developers of the project described and analyzed in this paper felt that the involvement and collective efforts of Chapman University and the Coachella Valley School District could provide unique benefit for both institutions while helping the community by developing new and strengthening existing collaborative efforts aimed at children and their families. Chapman University- Coachella Valley Campus is a private university with an enrollment of approximately 2,300 students, the vast majority of whom are enrolled as graduate students working on their teaching credentials or MA in Special Education, Curriculum or Educational Administration. Many Chapman students are currently employed by the Coachella Valley Unified School District (CVUSD). This school district had been in a state of disarray and bankruptcy which led to its takeover by the State of California. It should be emphasized that a State takeover is relatively rare and is only done under dire circumstances. State takeovers are not used for political reasons.

At the time this collaborative project began, the school district and its school board was in the third year ofstate control. In June1993, a state administrator appointed by the Dept. of Education in Sacramento was sent to the district to administer fiscal and operational activities of the district . Administrators and managers in the district were eager to collaborate on any type of project that would shed some positive publicity on the school system. The inclusion of Chapman University into this project was especially appealing to the state administrator who hoped that this alliance with a fiscally solvent and well respected private university would boost the public's confidence in the school district.

This paper provides a critical analysis of the development and implementation of a set of standards and commitments between Chapman University-Coachella campus and the Coachella Valley Unified School District . Both Chapman and the school district are physically located in Riverside County, CA.,but they are known to accommodate different constituencies. Chapman generally is perceived to be a well endowed private institution that caters to middle and upper middle class graduate students while the school district is located in the middle of migrant labor camps and substandard housing. University and the Both the school district are physically located in the Coachella Valley of Riverside County, CA., Vast differences in the organizational structure and cultures of the two institutions coupled with discrepant societal expectations for these two organizations became impediments to implementing this project's stated mission: To enhance the leadership ,capacity and overall administration of Collaborative Services For Children and Families residing in Coachella Valley.

There is an urgent need for low cost or free medical services and social services for children is far greater than the current capacity to provide these services. This valley is part of the Majave desert and encompasses an extremely large area of Eastern Riverside County. Riverside County is one of the fastest growing counties in the State of California. Recently the county and its residents have been the topic of many heated debates regarding the alleged abundance of undocumented aliens who come from Mexico and settle in this region. Although most people admit that these undocumented aliens do the work that American citizens find distasteful, there still is a substantial and vocal blacklash against undocumented aliens in many parts of the valley. Visitors to the valley are immediately struck by the extremes: the western portion of the valley (where Chapman is located) consists of such resort communities as Palm Springs, Rancho Mirage and Indian Wells where the majority of the residents live in extreme affluence. The middle class city of India serves as the "de-facto" dividing line between the haves and have nots. At the eastern end of India, the landscape changes from suburban to agricultural. The demography also changes: from this point to the next county line, the area is primarily agricultural. The majority of people residing in this area live in poverty. The area surrounding the city of Coachella was one of the areas that the famous Latino activist, Cesar Chavez organized farm laborers in the 1960's. Unfortunately, economic and social progress seems to have passed this area by. A recent Rockefeller report cited the city of Coachella as the sixth poorest in the nation. The federal government has designated this area as "medically undeserved". Migrant workers are usually undocumented aliens and live in substandard "housing or in "tent cities". Because the Mexican border is only 90 miles away and there is plenty of agricultural work, many Mexicans favor coming to Coachella illegally. The Interstate Highway 10 runs through Coachella and it makes the city a convenient exchange point for "drug drop off, from Mexico and South America. A sophisticated network of railroads run almost parallel to Interstate 10 and drugs are occasionally transported in the rail cars. The country of Mexico also provides other influences to the valley, most notably political style. Indeed, many key informants in the valley have expressed the opinion that local political leaders in the city of Coachella seem to role model themselves after politicians in Mexico where bribing elected officials is more commonplace than in America. It does not appear that politics draws "the best and the brightest" at least socially. Recently, the mayor of Coachella was arrested and taken into custody because he allegedly injured his wife during a domestic dispute. Currently the mayor's son faces trial on charges of misdemeanor battery after allegedly hitting a city councilman in July. Last year, the former mayor(while still in office) faced charges after allegedly grabbing a Coachella resident around the neck during a fund-raiser at a local gambling hall. The former mayor currently serves on the city council. The City Manager was suspended without pay for owing more than $26,00 in back child support and driving with a license that had been suspended for six years. Members of the police dept. have been implicated with complicity in this scandal. If these type of incidents happened in the more affluent sections of this valley, there probably would be a terrible outcry from the citizenry and a movement to "throw the rascals out".

The city councils of Rancho Mirage and Indian Wells operate with fairly sophisticated forms of governance but local officials in these cities claim that the Coachella city council has rebuffed their suggestions for helping Coachella's governance structure become more professional Rancho Mirage and Indian Wells officials offer residents many opportunities to serve on ad-hoc advisory committees, and the citizens gladly oblige. This is not the case in Coachella. The city government officials reactions to attempts at forming a coalition of valley governments to discuss issues of mutual interest are lukewarm at best. It is interesting to note that many city councilmen in Coachella are employed by the local gaming casinos. Most notably is the former mayor of Coachella.

The glaring differences in levels of affluence,education and ethnic backgrounds between the Eastern and Western portions of the county make collaboration a difficult job. It was hoped that a neutral third party, such as a private University would be able to communicate and begin collaborating with the local school district with a minimum of rancor. The school district started out as an enthusiastic partner but the road has been paved with delays and priorities given to other issues. Even with these concerns,, this partnership is one of the success stories of the valley.

In the conceptual and developmental stage, this project was quite appealing to decision makers in both institutions. Both agencies perceived real benefits to their home agency as well as enhancing collaborative services in the valley. The school district wanted some positive publicity while the University wanted to be known as an innovative institution who knew how to reform educational and social services with a minimum of disarray. Essentially it was a "win-win" partnership.

Collective perceived benefits were

- Using technology to link information from wide geographic area
- Sharing of planning and implementation documents
- Student/school faculty and Chapman faculty exchanges
- Arranging of joint in-service programs between Chapman and CVUSD
- Joint planning and implementation of college credit coursework in the field of comprehensive services
- Plans for joint grantsmanship
- Collaborative planning for future conference and journal presentations and publications

Primary Benefits for The University

1. A joint effort between a local university and a school district which would contribute to the body of interdisciplinary knowledge of comprehensive services.
2. The opportunity for University researchers to study the realistic problems of coordinating children's services in a natural setting.
3. Enable University personnel to begin to develop course work in this field to be offered at a later date.
4. Opportunities for Chapman students pursuing graduate work in the School of Education to conduct field work comprehensive and related services.
5. Recognition of Chapman University faculty as major problem solvers of human service needs in the Coachella Valley.

Primary Benefits For The School District

1. Increase its capacity and knowledge of obtaining information about and writing proposals for collaborative school based efforts .
2. Positive publicity
3. obtain an independent "expert" view of the district's current collaborative efforts.
4. awareness of"best practices" in collaborative services.

5. Assistance in learning about opportunities for pooling resources between programs and applying for "waivers"
6. National recognition for the Coachella Valley School District Stakeholders for their exemplary child and family service.

Essential research agendas that emerged from the early implementation of this project were as follows:

Do joint collaborative fail because of the inherent structure of governmental agencies?

What can be done to improve the organizational and governmental structures that appear to impede progress?

Are clients becoming empowered because of these collaborative or are they becoming more confused and therefore more alienated against the system.

Do collaborative efforts between Universities and School districts make a measurable difference in the quantity and nature of services for children and their families?

Do stakeholders feel a sense of empowerment?

Is the program meeting the perceived needs of the community as enunciated by community members?

What outputs should be measured and by what standards?

Is the collaborative emphasizing community strengths or merely reiterating community deficits?

When one entity in the collaborative in uneasy with the ethical behavior of the other partner what steps need to be taken (if any) to rectify the situation?

How do you stop the resource rich party in the collaborative from dominating the poorer partner?

Are collaborative best kept at the ad-hoc level or should they be formalized. What are the costs and benefits of each school of thought?

Can the design and implementation of the collaborative be connected back to the original tenets and concepts of school and social reform?

What did each agency "give up" or neglect in order to take part in this collaborative?

Did the ends justify the means?

Although many would conclude that forming a collaborative partnership is too cumbersome and time consuming, one must look at the alternative: do nothing and then each agency is surely doomed to fail at significant and lasting school and social reform.

PARTNERSHIP BETWEEN PRIMARY, SECONDARY AND UNIVERSITY TEACHERS AND LITERATE AND NON-LITERATE PARENTS IN CURRICULUM DEVELOPMENT

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I. INTRODUCTION

The president of a university met a secondary school principal at a party and the principal asked the president, "Sir, when will you stop sending me illiterate graduate teachers?" The president replied, "When you stop sending me illiterate undergraduates!"

While concerted efforts are being made by the International Council on Education for Teaching (ICET) and other bodies to promote international cooperation and partnership in education, teachers and administrators at the three principal levels of education - primary, secondary and tertiary - tend to remain in splendid isolation from one another, each group keeping its own counsel, particularly in developing countries and even in some developed countries as well. Even in the schools used as teaching laboratories by colleges of education the relationship between the classroom teacher and the supervising professor is more like a junior/senior partner situation or worse still, servant/master relationship, when in fact both are equal partners in ensuring that the student-teacher receives maximum benefit from the experience. Mercifully, this attitude is not universal; nevertheless the fact that it exists makes it imperative that we "kick the habit" as teacher educators.

Again, traditionally, text-book writing or teaching material development tends to be the exclusive preserve of learned authors or specialist subject teachers at the tertiary level, particularly in developing countries, Nigeria included. It is often erroneously `assumed that the best writers of text materials for physics, chemistry or social studies in secondary and even primary schools are university teachers/professors who specialist in these subjects Worse still, most of the writers do not consider it necessary to seek the assistance of the classroom teachers as resource persons. In most developing countries the primary school teacher is the least recognised as "learned" even in her own subject and in her own classroom which she may have successfully handled for more than a decade. Yet the "experts"' textbooks are just handed to her with no plan for feedback. If she is lucky she will be given a short induction course of a day or a few days at best on how to "handle" the materials.

This paper will focus mainly on the collaborative efforts among the Ife University Six Year Primary Education Project organisers the State Ministry of Education University Colleges of Education, Secondary and Primary school teachers as well as literate and non-literate parents in the development of the Six Year Primary Education curriculum. The study itself will be briefly summarised in terms of its assumptions, hypotheses, strategies, implementation and conclusions.{1} The major concern of this paper, which deals with partnership will be discussed in full detail.

II. The Ife Primary Education Research Project In Curriculum Development Summary

The University Institute of Education launched the Ife Six-Year Primary Education Project with Yoruba (mother tongue) as the medium of instruction for six years of primary education (in place of English) and English (the erstwhile medium) as the second language. The Ife Experiment (1970-1983) was predicated on the following hypotheses:

(a) that the child will benefit culturally, socially, linguistically and cognitively through the use of his mother-tongue as the medium of instruction throughout the six year of primary school; and
(b) that his command of English will improve considerably if he is taught English as an entirely separate subject by a specially trained teacher throughout the six years.

The main objective of the project was to develop a coherent primary education for the child and make him an intelligent citizen of his country and to this end,

(a) to develop a primary school curriculum that is relevant and useful both to the child whose formal education may terminate in primary six and the child whose education may continue thereafter;
(b) to employ the Yoruba language as the medium of instruction.
(c) to teach the English language effectively as a second language, and
(d) to evaluate the project continually with a view to determining the presence or absence of certain significant differences between the Project children and those of primary schools not connected with the Project.

Five major subject areas were chosen for instructional purposes. These were:

(1) Social and Cultural Studies,
(2) Science, including Health and Sanitation (SAYENSI)
(3) Mathematics (MATIMATIKI),
(4) Yoruba Language and Literature, and
(5) English as a second language.

The design provided for a regular intake of Primary 1 classes each year from Year 1 to 6. One group was experimental and the other, control. 0riginally a primary School at Ile-Ife was used as the pilot school. A total of 720 children (480 in the experiment group and 240 in the control group) participated in the project between 1970 and 1980. Later the experiment was extended to ten other primary schools in five rural and five semi-urban towns in Oyo State. These schools were classified as proliferation schools. Some of them served as experimental while others served as control. Another set of 700 children were enrolled and taught over a period of six years.

The experimental group was taught in Yoruba in all subjects except English, that is to say, Social & Cultural Studies, Science and Mathematics were taught in Yoruba throughout the six years. Enwas taught from the first year to the sixth as a second language. In the control classes Yoruba was used as a medium of instruction for the first three years and English for the last three years, while Yoruba was taught as a subject. It should be noted that all the text materials in Yoruba, English, Social and Cultural Studies, Mathematics and Science were written and printed by the Project team over a period of five years. Two sets of each material were produced: one in Yoruba and one in English from Primary 1 to 6. The text materials produced for each subject and for each year comprised:

(a) teachers' books,

(b) pupils' books,
(c) workbooks in Yoruba and English, and
(d) several supplementary readers in both Yoruba and English.

One hundred and eighty three text materials were produced over a period of five years.

Evaluation Results

Data collection was initiated from the beginning with particular reference to:

(a) the quality of teaching staff
(b) the characteristics of the Project children, and
(c) the learning environment, viz., teacher allocation, administration, and resources for learning. The techniques used included questionnaire, Nelson-Denny Reading Test, Test M, Progressive matrices and observations.

Hypotheses testing with reference to cognitive achievement was a longitudinal study spanning a period of thirteen years. The last one ??? comprised all other schools not involved in the experiment and using an entirely conventional approach as laid down by the Ministry of Education in terms of text-books, methods, time-table, examinations, etc.

Research Instruments

Three major instruments were used for the evaluation exercises for the duration of the experiment:
(a) Intelligence tests,
(b) Achievement tests, and
(c) Demographic data forms.

Analyses Procedures

The analysis of variance and after-factor analysis of the tests were used, while the analysis of co-variance was the principal statistical procedure used to analyse the results of tests administered to the pupils in the five treatment groups included in the evaluation.

Follow-up Study of Effective Outcomes

Experimental Project children in secondary schools were compared with their contemporaries who had passed through the conventional route. Two instruments were used:
(a) Student Problem Inventory (SPI)
(b) Sociometric instrument in which all members of the classes in which Project children were had to choose one person with whom they would like to do certain things or whom they would like to see occupy certain positions, namely, as a leader, study-mate, play-mate, trip-mate, confidant or as someone to ask a favour of, or share food with.

Summary of Results

A. Cognitive Achievement (deals with the effectiveness or otherwise of the medium of instruction, the curriculum and the use of a specialist teacher-)

(a) Results showed that the experimental groups (St. Stephen's Experimental School), SSE Urban, excelled above the remaining groups in all the school subjects at the end of their primary education. The result also showed that the use of a specialist English teacher did not make any significant difference to the result

(b) Again, as demonstrated in the urban setting (SSE) the Proliferation Experimental group (PE) in rural areas turned out to be the best achievers in all of the subjects towards the end of their primary school education. This again indicated that the medium of instruction, Yoruba, had been effective. This group had no specialist English teacher in the rural setting, yet the group came out to be the best achievers in all subjects, including English.

B. Affective Outcomes

(a)On the Students Problem Inventory (SPI) form which compared the scores of Project and non-Project children at the secondary school level, the results showed that the Project children reported, on the average, fewer problems than the non-Project children. This was consistently so in all the sub-sections of the Inventory as well as in the total scores.

(b) In respect of the Sociometric Instrument, the results showed that the Project children:

(i) were on the whole slightly above average in social acceptability, and

(ii) were notably above average in acceptability as leaders, study-mates, trip-mates and playmates.

The Ife Experiment proved so successful that the Oyo State, where the project was located enrolled more than 300,000 children in the programme over the last four years. In addition ten states in Nigeria have adopted the Ife programme in modified form, while two million Yoruba-speaking children have made use of the Ife text materials.

III. Governmental Institutional and Parental Partnership in Curriculum Development Strategies of the Project

(a) the selection, with the approval of the Ministry of Education of the four Western States, of a typical primary school in Ile-Ife township to serve as a site for the experiment with two arms of Near 1 Class designated as the experimental group and a third arm as a control;

(b) the establishment in the Institute of Education of a corps of professionals and supporting staff to serve as a Steering Committee and to work with the primary school for the in-service training of teachers, the implementation of new methods and materials and the supervision of the Project;

(c) the establishment of an advisory committee for the Project consisting of University lecturers and professors from Ibadan, Lagos and Ife, as well as some teachers from primary and secondary schools in the Western State;

(d) the organization of curriculum writing teams in each of the five subjects chosen by the Project for instructional purposes and comprising university teachers, primary and secondary school teachers and principals in the following subjects:

(i) Social and Cultural Studies which embrace music, art, folklore, literature, civics, geography, history, etc.;
(ii) Science, which includes health and sanitation;
(iii) Mathematics;
(iv) Yoruba Language arts;
(v) English as a second language;

(e) formation of a panel of Nigerian consultants in several disciplines to determine technical details and strategies and assist in coining, borrowing, translating, etc.

Steps were taken to solve the different types of problems concerning the setting up of the Project. First, a series of discussions and seminars were held involving many experts in academic, professional and linguistic fields. The Ministry of Education (as well as the Ife Local Education Authority) gave its full support and even allowed the Project a free hand in adapting the chosen school for the experiment.

Ministry of Education

The former Western State Ministry of Education, later known as the Oyo State Ministry of Education was involved in the Project right from its inception and made the following contributions:

(i) granted permission for the use of state schools for the project.
(ii) provided and paid the salaries of teachers assigned to the Project;
(iii) allowed teachers to remain on the Project throughout the duration of the experiment.
(iv) recognized the Project as a duty post when the teachers on the Project were qualified for such posting;
(v) allowed its representatives to participate in the writing and the evaluation workshops; and
(vi) periodically sent a team of inspectors to the school to evaluate the Project.

The Ford Foundation

The Director of the Institute of Education, University of Ife held discussions with the Ford foundation representative in Nigeria and sought financial support for a 'Six Year Primary Education in Yoruba.' The Foundation promised support and requested a detailed proposal, including financial estimates. The first financial request was for one hundred thousand naira (N100,000 or U.S.$170,000) for the first two years of the project. The Foundation later made other grants totalling over two hundred and fifty thousand U.S. dollars ($250,000) during the six years of the Project.

In addition to the direct financial support, the Foundation at the request of the Institute assigned a renowned linguistics expert to work with the Project on a part-time basis for a period of three years. The Foundation also assigned to the Project a Nigerian specialist teacher of English at its own expense for two years. It also assisted the Project in the ordering of certain materials and equipment needed by the Project, agaat its own expense. Two members of the Institute were sponsored for higher degrees in the United States, and two teams of teachers engaged at the main Project school were also sponsored for educational visits to the United States during the first six years of the Project.

The Universities

The staff of the three Federal Universities, namely, the Universities of Ife Ibadan and Lagos participated actively in the Project right from its inception.

(a) The University of Ife

The Six Year Primary Project was based at the Institute of Education University of Ife where it was initiated, organized and administered on a day to day basis. The Vice Chancellor of Ife gave his instant approval for the Project and supported the Institute's application to the Ford Foundation for financial assistance. The University of Ife made the following substantial contribution to the success of the Project:

Staffing

The University contributed nine staff members to the Project: the Director or of the Institute who directed the project; a Project coordinator; a specialist English teacher, first assigned to the project by the Ford Foundation and later absorbed by the University; a mathematics coordinator, a Yoruba coordinator; a fire arts specialist and three primary school teachers attached to the Institute. In addition, a number of faculty and Institute staff, as well as some academic staff from the faculties of Arts and Science, participated in the Project on a voluntary basis.

The Project was not limited to the University of Ife staff alone; interested educators and language specialists from the Universities of Ibadan and Lagos also participated. As was the case with the staff of the Universities of Ife, Ibadan and Lagos, participants attended many of the four to six-week long vacation writing workshops and contributed immensely to the development of teaching materials and aids for the Project. Some of them also served on the advisory panel.

(b) The University of Ibadan

The University's Educational Evaluation Centre assumed leadership for the continuous evaluation of the Project from the second year till the end, even though two outside evaluators, in association with a University of Ife staff conducted a special evaluation on the Project children as well.

It was also gratifying to note that the Universities, particularly Ibadan and Ife had encouraged many of their post-graduate students in education to conduct M.A. and Ph.D. research projects on certain aspects of the Six Year Primary Project. For example, some University of Ibadan, Institute of Education's post-graduate students wrote their M.Ed. dissertations and Ph.D's on academic achievements and emotional adjustment of the Project children. Two of the Project staff at the University of Ife received their Ph.D. degrees in areas related to the Project, and numerous papers were presented at national and international conferences including ICET, on the Six Year Primary Project at various times, by staff of the Universities of Ife Ibadan and Lagos.

It can be safely said that the Six-Year Primary Project is one of the very few national projects that promoted inter-university collaboration among some Nigerian Universities as well as international cooperation.

Representatives, individuals and delegates from Nigerian institutions of higher learning, as well as those from foreign universities visited the Project and held discussions with the Project organizers, and two scholars who were post-graduate students of the University of Illinois, U.S.A were sponsored by UNESCO for two months with the Project at Ife to collect material on mother-tongue education. The two completed their Ph.D. studies and returned to Mali.

Parents' Contribution

Two things compelled an early contact with the parents of the children. The First was the parents' stiff opposition to the Project reported by some headmasters. They said that many parents, *the* majority of whom were highly educated, had threatened to remove their children from the school if they were put in the Project classes. Their opposition was due to the erroneous ideas they had about the Project. They feared that the children in the Project class would not be as proficient in English as their counterparts in the 'normal' classes, and as a result these children might miss selection to secondary school or fail to do well in the school if by chance they were selected.

The attitude of the parents could be summed up in the words of one of the Project teachers as follows: "The news of the special class was met with mixed feelings. Many literate parents doubted the success of the experiment and wanted to withdraw their children. They feared lack of progress of the children in this experimental class. They put such questions as "Is the teaching of science in primary one not a bad experiment? How could a subject meant for post-primary course be successfully taught in primary one without confusing the children from the initial stage? How would you express mathematical terms in Yoruba? In which secondary school will the pupils continue this system of education'? How will such children compete successfully with their counterparts who are brought up in the traditional system? Is *Matimatiki* for mathematics and *Sayensi* for science not ridiculous?" {3}

Such questions were patiently dealt with. For example, it was explained that the science syllabus for primary one concentrates on things that would interest the children, such as playing with sand and water and colour producing materials. And it is interesting to note that pupils were always happy when it was time for science. They never liked to miss the lesson! The novelty and the play-method adopted made it interesting and it became the children's favourite subject. It was also explained that the organizers of the course were not only mature and experienced scholars but also devoted parents. They were therefore attempting to satisfy the needs of the children, including their-post-primary education

Again, it was explained that the use of words such as *Matimatiki* and *Sayensi* should not appear embarrassing or ridiculous because once they are in use, they would become part of the Yoruba language. It is recalled that words such as *raisi* (rice) *leedi* lead), *Kampeni (* campaign) have now become Yoruba words

There was also the need to direct parents as to the type of help they could offer to their children which would not be in conflict with the methods being used in school, especially in English and mathematics. Serious attempts were therefore made to explain the objectives of the Project to parents In this regard the teachers of the Project deserve great commendation

Several times the teachers arranged meetings with the parents in order to explain the Project. Parents were also invited to school to see the children at work. The work done by the children was also displayed at Parent-Teacher meetings. The fears of the parents were allayed partly by the explanations given at the meetings and partly by their children's performances in and outside the classroom.

Although at inception, there were threats of withdrawal of children from Project classes, by the end of the first year, the class lost only two pupils One moved to another town and one had died. The protesting parents later became great advocates of the Project. For example the illiterate ones who never dreamt of being in a position to help their children with their school homework since they themselves did not attend any school, found themselves helping their children in Social and Cultural Studies, Science and even in Mathematics in a small way, since the medium of teaching and learning was Yoruba.

Parents also contributed some visual aids in the form of traditional artifacts - utensils, drums and other musical instruments for the teaching of social and cultural studies and science. The Project children were encouraged by the teachers to ask their parents to teach them folklore, stories, songs and proverbs and to enquire from their elders how various festivals and cultural ceremonies were performed, e.g., naming ceremonies, marriage ceremonies, funeral rites, etc. Both the Project teacheand the Project organizers put many of these into writing and recorded others on tape.

Many of the non-literate parents were happy to discover that they had some things to teach the teachers and their children that they volunteered to visit the school and to help demonstrate how the various festivals and other cultural ceremonies were done. They were enthusiastically encouraged to do so by the Project organizers, the head teachers and the classroom teachers.

This interaction introduces another dimension into the teacher-training programme especially in the implementation of the Social and Cultural Studies role. Thus, to the parents, the activities in the classroom became a reality, and primary school education ceased to be a matter of conjecture or fantasy. For the first time, the home came to take an active interest in the work of the school. One side-effect of this collaboration by the curriculum specialists with the local resource-people was the mutual interest developed between the school and the home, thus developing an established rapport euphemistically referred to as the meeting of "town and gown".

Local Resource Persons

One of the important lessons learnt by the Project organizers was the invaluable contribution that could be made by non literate people in the rural area. The rural community tends to retain more of the or original language patterns and concepts as compared with their educated counterparts. Many of the original cultural and social aspects of a Nigerian language are generally retained by the rural communities.

At the very inception of the Project, the organizers realized the need to consult the old and the wise in the village communities for lexis, phrases, concepts and cultural practices not commonly used in urban areas. Teachers, pupils, panel writers and the Project organizers paid extensive visits and made contact with the village elders who are experts in their own right. Often-times, certain concepts in science or mathematics or social and cultural studies in particular defied the Project workers' understanding, and in many cases the rural dwellers were familiar with the concepts in Yoruba. It therefore became a policy of the Project not to coin, substitute or translate a concept until the rural sages had been consulted. As a result of this practice, materials were greatly enriched.

The Writing Panels

The first of six writing workshops began with an attempt to find solutions to the various problems regarding the curriculum, the syllabus and teaching materials Its specific objectives were:

(a) to produce a coherent and comprehensive primary school programme capable of providing a sound educational foundation for well-integrated future citizens of the Western State of Nigeria in this technological and scientific age;

(b) to produce teaching materials, teachers' guides, as well as pupils' books for the first two years of the Project;

(c) to evaluate the working of the Project and make suggestions for improvement.

Thus, in view of the objectives set for the workshop and what it actually achieved, it could be seen in retrospect as initiating a revolution in curriculum development in Nigeria. It should also be noted that it was from this workshop that three very significant recommendations concerning the working of the Project were made:

(a) In view of the fact that the major issue of the enquiry in the Project is the medium of instruction, both the experimental class and the control class should follow the same programme using identical materials, one in English, one in Yoruba.

(b) As a result of the first recommendation (and also for the purposes of serving as examples to non-Yoruba speaking Africans who might like to refer to the experience of the Project), the syllabus, schemes of work and (where possible or necessary) even the teaching materials should be produced in both Yoruba and English.

(c) For the uniformity of orthographic conventions to be followed the Yoruba versions of all materials produced should be edited within a single frame.

The Yoruba Language Materials

For the first time in the history of Yoruba language teaching at the primary level, learning and teaching texts were developed extensively and in consonance with the units of learning recommended in the syllabus. A total of twenty-five titles were developed for the promotion of Yoruba language skills. These covered the following areas:

(a) Reading readiness texts,
(b) Pupils' Course Books (Years 1 to 6),
(c) Teachers' guides,
(d) Workbooks for pupils,
(e) Supplementary readers,
(f) Special comprehension texts.

All other writing workshops - Mathematics, Science, Social & Cultural Studies and English followed the same procedure.

It became necessary for all the writing panels except the English one to meet to discuss the syllabus content of every other subject area in relation to the Yoruba language syllabus. General guidelines and principles of development were agreed upon and where necessary, specific items or units were included in the Yoruba language syllabus to enhance work done in the other subject areas, especially in social and Cultural Studies. Care was taken to achieve a measure of integration in all the syllabuses since the medium of instruction was going to be Yoruba, thus creating a channel for better integrated and more cohesive learning.

Science Workshop Panel and Contributions of Non-literates

Applying the philosophy of the Six Year Primary Project, the Curriculum writing workshop believed that the child would acquire science concepts better in his mother tongue than in English at the early stages of hits education. Of all the writing panels set up by the Project, the science panel had the most formidable task. For instance, none of the science writers had ever learnt or taught science in Yoruba formally before the commencement of the Project; consequently they had to really wrestle with science concepts in Yoruba

The Project set up "lexical committee" particularly for science to adjudicate on final selection of *words and concepts that would* adequately expression Yoruba certain scientific expressions. This panel never took off and the Project had to use the collective wisdom of the panel writers themselves, Yoruba specialists and old men and women in Yoruba villages and hamlets to meet this challenge Experience had shown that there exist some Yoruba words, concepts and vocabulary still in use by non-literate Yoruba in the rural areas but long forgotten by or unknown to many educated or city-oriented Yoruba. The following methods were employed by the science panel in arriving at a decision on what Yoruba word or concept to use in a given situation namely coinage, borrowing and extension of referential coverage.

Social and Cultural Studies Panel

The panel of Social and Cultural Studies writers, as mentioned earlier was made up of university teachers, college of education teachers interested professional officers of the Ministry of Education and experienced primary school teachers. A unique aspect of the composition of the panel was the inclusion of interested parents as local resource-persons who were interested in and were associated with, the promotion of cultural heritage in the community.

The resources of the local people were tapped to the fullest in the provision of item-contents like stories, anecdotes, information on religious observances and traditional practices that exemplify virtues, attitudes and ethos which define the Yoruba culture. In addition, in the development of a concept, whenever the text writers ran into difficulties on the issue of appropriate vocabulary, like register or lexis, the local resource people were available to give the required assistance

Because of the involvement of the children's parents (the local resource-persons) in the creation of materials, the contents of the Social and Cultural Studies became more meaningful to the children, as well as providing them with contact with a world beyond the walls of the classroom.

Evolution of Text Material and Teacher Involvement

Annually, as new materials were produced, classroom teachers who were to teach the new materials to the pupils were given induction courses before the coof school and training on the job.

At the beginning of each writing workshop, the classroom teachers always presented a critical review of the text from their own classroom experience during the year, both positive and negative. Some comments were related to level of understanding and assimilation by the children, use of Yoruba words and difficulties encountered by the teacher or the pupils during classroom activities.

At the beginning of each session, the first task of the writing panel, which included the same teachers, was to resolve all the points raised by the teachers and re-write the portions affected before moving forward. In other words, the children "taught us how to teach them effectively!"

The manuscripts, especially for the pupils, were usually submitted to the language experts among the Project organizers for proper editing, during which the suitability of the subject content was determined, the language of the writers moderated to the level of understanding of the learner and correct orthography ascertained. The texts for all the subject areas were mimeographed for the entire period of the Project in order to reduce costs. In addition to the opportunity that the teachers had to work with the panel of writers during the workshop period, at the stage of introducing the subject into the school, on-the-spot orientation courses were run for the teachers to familiarize them with the contents of the text and acquisition of appropriate methodology for the teaching of the course.

A notably happy aspect of the exercise at this stage of trial-testing of the text material was that the materials placed in the hands of these teachers were a product of their joint efforts with the curriculum developers, and so they displayed an uncommon interest and delight in the teaching of the contents that were real and meaningful to them. It was the outcome of the classroom experience that the teachers fed back to the curriculum writers at every succeeding workshop session, as a guide in the preparation of subsequent instructional materials or course contents The materials thus developed allowed for a free classroom atmosphere which was conducive to teaching activities of a solid, meaningful type, the kind of environment that would produce better-adjusted, more relaxed, more enterprising and more resourceful pupils as postulated by the organizers of the Project.

It is essential to highlight the role of the primary school teachers in fostering the establishment of social and cultural studies in school and according it a pride of place in the general curriculum of the primary school.

The entire Project included in its personnel primary school teachers of long standing right from the start when the curriculum was to be developed. It was therefore a natural sequence that these teachers should be the ones to test the Project pupils in the classroom. Since these teachers were involved in the workshop sessions for writing, their experience in the classroom served as an evaluation mechanism for the improvement of the Social and Cultural Studies syllabus, scheme of work and texts produced.

Since this was a completely new subject-area, the classroom teachers to handle it were given special training in instructional technique and with an in-built evaluative strategy. It was in fact part of the conception of the curriculum developers that at every stage it should be possible to assess the effectiveness of the instruction, as well as the learning successes of the pupils through demonstrable skills, appropriate knowledge, attitudes and normative behaviours.

One of the great lessons learnt from the Ife Project was the principle of borrowing, coining and adoption in expressing a new concept or idea foreign to the mother-tongue. This was not strange, nor was it peculiar to Nigerian languages The English language is replete with terms borrowed or adapted from other languages of the Indo-European or Germanic group. Without unduly belabouring the issue, some examples of English vocabulary would suffice: words like *encore, restaurant, champagne, coup, elite, rapport, detente* tell the story.

The Ife experience also proved the immense possibilities there are for the use of any language. The stock of new words that has been unearthed since the Project addressed itself to the use of Yoruba in expressing ideas and concepts has been revealing and this has been made possible through cooperation with three sets of people, viz:

(a) the illiterate but knowledgeable members of the society.
(b) the literate, particularly the aged members of the society, and
(c) men and women steeped in the knowledge of traditional culture

Footnotes

1. For full details of the study, see Fafunwa, A.B., Macauley, J.I. and Sokoya J.A.F., (Editors), Education in Mother Tongue: The Ife Primary Education Research Project (1970-78), University Press Ltd., Ibadan, 1989.
2. Yoloye, E. A., Evaluation of Ife Six Year Primary Project, University of Ibadan, 1977.
3. Fafunwa, Macauley & Sokoya, opcit

References

Bamgbose, Ayo (editor) Mother Tongue Education: The West African Experience, Hodder and Stroughton, London 1976.

Bruner Jerome S., The Nature of Learning in John L. Leuis Teaching of School Physics, UNESCO Source Book, Penguin Books Limited, Middlesex, 1972.

Fafunwa, A. B. and Bliss, B. The Effect of Bilingualism on the Abstract and Concrete Thinking Ability of Yoruba Children, University of Ife, Ile-Ife, 1967.

Fafunwa, A.B. The Psychological Development of Children from O to 6 Years in Developing Countries. UNESCO meeting of experts, Urbana, Illinois, U.S.A., 1974.

Fafunwa, A.B., History of Education in Nigeria, George Allen and Unwin, London, 1974.

Fafunwa, A. Babs et al, 1974, Six Year Primary Project (a) Report No. 1; (b) Report No. 2, Institute of Education, University of Ife 1972 and 1974.

Fafunwa, A. Babs Education in the Mother-tongue: A Nigerian Experiment - The Six Year (Yoruba medium) Primary Education Project at the University of Ife West African Journal of Education, Vol. XIX, No. 2 June 1975

Fafunwa, A.B. Facilitating the Adoption of African Languages as Educational Instruments in African Countries: The Case of Nigeria, UNESCO, BREDA, Dakar Senegal, Commissioned Paper, November 1987, P. 86

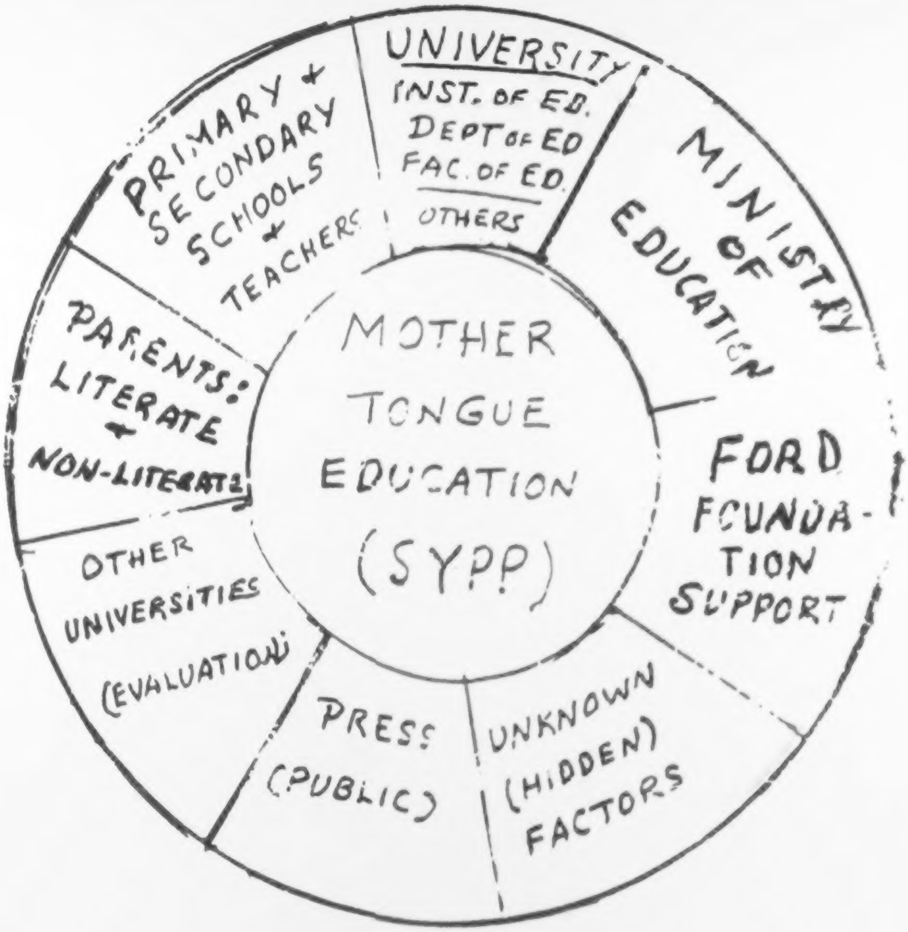
Fafunwa, A.B. & Sokoya J.A.F. Guidelines to the Planning of Language Teaching in African Countries. UNESCO, BREDA, Dakar, Commissioned Paper, November 1988.

Ojerinde, A. and Cziko G., Yoruba Six Year Primary Project, June 1977 Evaluation, Institute of Education, University of Ife Ile-Ife January 1978

Glossary of Technical Terminology for Primary Schools in Nigeria, Federal Ministry of Education, Lagos.

Yoloye, E.A.
(a) 1972, S Y.P.P. Evaluation Report No. I.
(b) 1973, S.Y.Y.P Evaluation Report No II
(c) 1977, Evaluation of the *Ife Six Year Primary Project,*
(African Regional Cent re for Advanced Training in Educational Evaluation, University of Ibadan).

Education in Mothers Tongue Experiment
In Negeria


MOTHER TONGUE EDUCATION (SYPP)
UNIVERSITY
INST. OF ED.
DEPT OF ED
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OTHERS
MINISTRY OF EDUCATION
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UNKNOWN (HIDDEN) FACTORS
PRESS (PUBLIC)
OTHER UNIVERSITIES (EVALUATION)
PARENTS: LITERATE + NON-LITERATE
PRIMARY + SECONDARY SCHOOLS + TEACHERS

University of IFE
Six Year Primary Project
(1970-1989)

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A FACULTY DEVELOPMENT PROGRAM FOR PILOTING A NEW MATHEMATICS, SCIENCE AND TECHNOLOGY CURRICULUM

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Drexel University
U.S.A

Partnership Participants

Drexel University was founded in 1891 by Anthony J. Drexel a Philadelphia financier and philanthropist. Originally named Drexel Institute of Art, Science and Industry, it become Drexel Institute of Technology in 1936. In the 1969-70 academic year, Drexel formally became Drexel University.

Drexel University operates one of the largest mandatory co-operative education programs in the USA. More than 1,200 business, industrial, governmental and other institutions located in 34 different states and 11 foreign countries "cooperate" with Drexel by enabling students to acquire practical experience related to college studies through periods of paid employment.

In 1983, Drexel became the nations first university to require all entering students to have personal access to a microcomputer Today, micro computing is integrated into all fields of study, with more than 2.000 course-related materials and applications developed by Drexel faculty, students and staff.

The George Washington Carver High School of Engineering and Science is an academic preparatory magnet high school students interested in post high school careers having heavy dependence on mathematics, science, and technology Students from all races and ethnic backgrounds are recruited from over 100 different public parochial and private schools. Students receive four years of excellent hands-on instruction in these subjects, as well as high quality instruction in all the other state-mandated subjects required for graduation. Academic excellence is the pervasive educational philosophy at Carver High School. The association between the George Washington Carver High School of Engineering and Science and Drexel University began in 1992. Over the past three years, Carver and Drexel have built a multifaceted relationship which has evolved to include a range of educational enrichment and mentoring activities, a concurrent enrollment program and some department-specific faculty development. To undertake the curriculum reform proposed here, Drexel and Carver staff, already involved in other ways, will help assist with the curriculum reform project. Drexel University's E4 Program

In 1988, Drexel University piloted a revolutionary engineering curriculum called "Enhanced Educational Experience for Engineering Students" or E4 Drexel's pilot, the centerpiece of a national effort sponsored by the National Science Foundation and funded by an initial $2.1 million NSF, grant, was implemented as the core curriculum for the entire College of Engineering in 1994. The early success of the E4 project prompted the NSF, in March, 1992, to make an additional $15 million grant to a coalition of ten universities developed led and managed by Drexel, to expand and disseminate aspects of the new curriculum to other universities.

The E^4 approach uses engineering design and a focus on real world problems to integrate the learning of the basic elements of mathematics, science, and engineering along with the humanities, communication and management skills. All courses are taught by interdisciplinary teams of faculty. Students engage in hands-on learning with an emphasis on team based laboratory work and the acquisition of strong oral and written communication skills. The computer is introduced as a flexible, powerful professional and intellectual tool which the students need to use from the very beginning of their studies. An ongoing process of faculty/student evaluation functions as both a significant learning tool and as a guide to the ongoing development of the curriculum.

Need For the Program

The two year program aims at supplying the faculty development necessary for George Washington Carver High School teachers to support the creation of a pilot mathematics / science / and technology curriculum modeled upon Drexel University's nationally recognized E4 Curriculum This faculty development entailed running a one week Summer Workshop each year and providing technical assistance during the school year. The project commenced in the first year with a cohort of 12th grade students which will be expanded, in the second year, to include similar cohorts in the 9th, 10th and 11 11th grades. Carver faculty participating in the first year will serve as mentors for their colleagues in the second year.

The need for this program is to address, through the medium of curriculum reform, the joint problems of increasing the quality and scope of mathematics and science education in the United States and securing a sustainable pipeline of well educated traditionally under represented students for the nation's engineering and scientific disciplines. The timing of this project presents a unique opportunity to build upon the goals of the National Science Foundation's Urban Systemic Initiative for Philadelphia public schools which seeks to: (1) implement a national standards-based K-12 Mathematics / Science / Technology curriculum; (2) enact a systemic professional development program incorporating extant NSF-funded programs, university partners and school site-based professional development which employs the mentor-teachers model; (3) produce an extensive student support services network developed in conjunction with the other community partners; (4) use performance-based student assessments n concert with traditional student assessments; and (5) develop coordinated parent and community partnerships in support of MST education. While Drexel's program with Carver High School falls outside the scope of the USI precisely because Carver is a magnet school for engineering and science separate from the other Philadelphia community school clusters, the partnership in curriculum reform will have tremendous impact on the climate of change that will reshape Philadelphia's public school system which is the fifth largest in the nation with over 207,000 students and 12,000 teachers.

Carver High School's Pilot MST Curriculum Modeled on E^4

Carver's new MST curriculum enables students: (1) to learn mathematics, science and technology "as needed" in the context of hands-on learning (2) to effectively use the design process as a means to integrate this knowledge and (3) to build teaming skills by engaging in team-based learning . To accomplish these goals, to use a comprehensive design project will be used that will be worked on by groups of three to five students plus a faculty advisor. The students are asked to identify a technical problem that relates to the city, their community or school. Possible problem categories include local transportation, environmental quality, neighborhood rehabilitation, etc. The students study all aspects of their chosen problem: they have to document its cause, quantitative facts, the strengths and weaknesses of any prior attempted solutions, and the desired outcome as perceived by the people directly affected by the problem. Using all this information, the students write up a concise statement of the problem and its desired outcome. This is followed by team-based brainstorming for solutions and the creation of a 3 prioritized list of criteria to be used to evaluate potential solutions. The students select the solution that best meets all the criteria and describe it in detail utilizing where relevant, diagrams, drawings, models, and written report specifications During the entire process, the students are required to keep a daily journal that records what they have done, what they have learned along with their reactions to the process itself.

Summer Workshop for Carver Faculty

Prior to the one week workshop two one day workshops were held to discuss program philosophy roles of each faculty member on the team, team building skills, and general content areas to be included

The subject matter outlines were the following:

- Mathematics-probability and statistics, calculus (optimization techniques, analytic geometry and the use of Math Lab or Maple,
- Computer Education- word processing, spreadsheets, project management soft ware, slide show and use of Internet
- Technology computer aided drafting and model building:
  Communications -technical writing, oral communications, proposals practice presentations (video tape) effective use of visual aids and log books
- Science/Projects - design process, estimation/order of magnitude, team work, how it works and project management

The summer workshop brought together seven Carver High School faculty and staff for one week along with Drexel staff. The focus of the workshop was to Introduce to these faculty the design process that underlies the hands-on learning community of the E4 curriculum and to have the Carver faculty use this process to actually do projects of their own. Central to this was the use of continuous evaluation as a learning tool.

Other issues considered during the one week workshop were scheduled planning time for the Carver team of teachers, dedicated classroom and laboratory space for the program, field trips project materials and text books, grading, (separate grade for each course/content area - the grade will be a weighted value of both individual and group efforts, initially all group reports will be graded by the entire faculty) and a suggested name for the program (Engineering Design Drexel Carver -ED^{2}C).

The Carvefaculty, on their own, sought materials from the University of Maryland's Engineer Training Institute which will be used for several projects. They also invited one of the Maryland professors to visit Carver to give an introduction on the use of the materials.

A kick off for the project was held at Drexel University in late August for all students and parents . At the conclusion of the workshop and "kick off", faculty had a concrete plan for implementing the new curriculum with their students. This plan responds to the real limitations and opportunities of the school.

Academic year 1996-97 (Carver High School)

During the first week of the academic year students and faculty participated in group dynamics and team building skills to include an ice breaker activity, student interviews survival exercises, brain storming sessions and a radio station activity.

Thus tar this academic year units on acid rain, drag coefficient and impact testing have been studied.

A typical team schedule for the acid rain project was as follows:

Activity	**Day** 1	2	3	4	5	6	7	8	9	10
Prelaboratory	x	x								
Background subjects										
- Mathematics	x	x	x							
- Science	x	x	x							
- Technology	x	x	x							
- Computer education	x	x	x							
- Communication	x	x	x							
Experimentation				x	x					
Computations				x	x					
Practice for Interim Report						x				
Interim Report on Results of Experimentation							x			
Design Question								x	x	
Final Report										x

A few excerpts from some of the Carver students projects are given to show how the students approached and worked at the acid rain project.

ABSTRACT

"The Art museum steps are deteriorating. A small scale model of chalk and vinegar was set up to see how acid rain was effecting the steps in front of the Art Museum. The chalk took place of the material the steps are made of, and the vinegar was the substitute for acid rain. After viewing the chalk, before and after the experiment, it was obvious that an alternative was needed in order to preserve the steps for a longer time".

ABSTRACT

"The acidity of some rain has become the culprit of many deteriorating buildings and statues worldwide. The rate of the deterioration has alarmed numerous environmentalists and architectural lovers. Through certain experiments we have figured out different rates of deterioration, so in turn we tried to find ways to slow down the deterioration and ultimately stop it.

Through these experimentations we resolved that chemical treatments would be the best resolution to stopping the deterioration of these monumental structures. So the conclusion that we came to was to cover the statues and buildings with limestone. Other ideas that were discussed was cloth coverings and canopies, but they were soon excluded.

So we came to the conclusion that any deterioration caused by acid rain should be stopped by a thin coating of any alkaline, in our case limestone.

ANALYSIS

"Acid rain is due mainly to the burning of fossil fuels, and releases of sulfur and nitric in the air. 65% of the acidity in the air is due to sulfuric acid, 30% is due to nitric acid, and 5% is due to hydrochloric acid. Oil and coal-fired plants distribute the sulfuric acid, automobiles exhaust causes nitric acid, and natural sources such as volcanic eruptions causes hydrochloric acids Acid rain is measured by it's pH level, any rain that is under the pH of 5.65 is acidic.

Buildings and monuments are affected by acid rain based on the stone in which they are made of. Monuments that are made of limestone and marble are mostly affected by acid rain because they are made of calcium carbonate. These type of rocks are dissolved with a profuse generation of bubbles of carbon dioxide The Art Museum steps are made of marble which was explained before is extremely affected by acid rain.

The point of the research on acid rain was to find out how the Art Museum steps were affected by acid rain. We based our information on chalk-vinegar experiments that we had done in class, and research that we had done outside of the class. The question that was introduced in the introduction was if the experiment was a good experiment to compare to what is happening to the Art Museum steps or not? The experiment gave us what would somewhat happen to the step at a quicker pace, but there were some downfalls to the experiment. First, we used vinegar which has an average pH of 2.4, and chalk which is made of a weaker substance of calcium carbonate. Because the acidity is higher in the vinegar than actual acid rain, and which can give inaccurate information Second, the steps are not constantly being soaked into acid rain as the chalk was being soaked in the vinegar. Last but not least, other pollutants besides acid rain affects the deterioration of these buildings. The experiments helped us to better understand the causes of acid rain, and how it affects buildings but with inefficient information".

RECOMMENDATIONS

Our group has recommended that we use polyurethane. The reason we recommend polyurethane is because it is a water proof shield that can be used to coat the art museum steps. Thus shielding the steps will temporarily protect them from acid rain. Polyurethane is also inexpensive so the city will not have to pay much in coating the art museum steps. This is only a short term solution to the problem. The city will have still have to find a permanent solution But we hope that by slowing the corrosion of the steps the city can have more time to find a permanent solution.

The faculty team will also have the students in the pilot design program to consider the following University of Maryland Engineering Institute projects:

- Design of a river pontoon bridge
- Design of a river lock system
- Thin layer chromatography
- Ground water hydrology and hazardous waste clean-up

The Carver students have completed the acid rain project, final reports have been submitted and journals have been ready.

As the students prepare for the next team project, the communications instructor has asked the students to give some thought to "Ten Books to Recreate a Civilization" a position paper on "AN Alternative to Gasoline Powered Cars", papers on Artificial Intelligence within the context of being a materialist or a dualist and beg the question of "Can Machines (Computers) ever think like a human, and the design of "How to" brochures and advertisements.

Through the design process the students are expected to identify and understand the problem develop alternative solution; analyze alternative solutions using an appropriate set of criteria, cost, efficiency marketability and safety; select the "best" alternative and to describe the recommended solution.

As in Drexel's curriculum, the computer, is central to the new Mathematics / Science / Technology Curriculum at Carver. It functions as the primary professional and intellectual tool for the new curriculum. Specifically the computer and also Carver's Internet connection is used for gathering information for students' projects and for creating presentations of their ideas. The installed computer technology at Carver affords the students ready access to a full range of word processing, data analysis and desk-top presentation capabilities. Carver's Internet connection provides students with full access to the World Wide Web.

How This Program Represents An Addition To Regular Program

Drexel's experience and success with curriculum restructuring has led us to serve as a national model for such efforts at other universities. Our assistance to institutions of higher education is formalized through our National Science Foundation funded coalition. The success of our reforms and our own recruitment needs as an institution of higher education compel us to extend our dissemination efforts to encompass secondary education. Therefore, this project will represent the first time that Drexel will engage in helping to stimulate curriculum reform in the Philadelphia Public School System. Our choice of George Washington Carver High School builds upon our already existing relationship climate created for curriculum reform by the NSF Urban Systemic Initiative, soon to spread to other schools in the Philadelphia System.

Time Table

The fisummer workshop was held in July 1996 with the implementation of the first cohort of 1 12th graders in the 1996 97 school year. In addition to technical assistance provided by the project staff during the course of the school year, Drexel's ongoing multifaceted relationship will be coordinated to support in every way possible, the curriculum project. The second workshop will be run in the summer of 1997 and it will be followed by the same coordinated program of support for the 1997-98 school year. Evaluation will be conducted at each stage.

Program Evaluation and Future Support

Evaluation is a key component of this project as it is intrinsic to what we are trying to achieve. Beyond the role evaluation plays as a learning tool within the curriculum development and implementation process itself, we also plan to evaluate the implementation of the project. The participating faculty will evaluate each workshop and outside evaluations will rely on the expertise of the evaluator of the E^4 Program at Drexel.

We anticipate that the success of the pilot at Carver will lead to an internal change in the educational culture at the school that will, by Its very nature, be self-sustaining Our goal is to have the Carver faculty adapt our model to their circumstances and thereby define projects and experiments that can be done within the limitations of the resources available to them. Thus, the importance of this project and Its longevity ore not directly dependent upon the continuous infusion of large sums of money to support equipment or personnel.

References

Carver High School of Engineering and Science; Student Reports on the Acid Rain Project, Philadelphia PA, Fall 1996.

Drexel University Philadelphia, PA, E^4 (Enhanced Engineering Education Experience Documents and Papers (1993 -1994).

GTE Foundation Proposal on Faculty Curriculum Development Project Fall 1995 (Dr. John Mosteller).

University of Maryland, College Park, MD, Engineering Training Institute Projects, July 1995.

TEACHERS AND STUDENTS - STRATEGIES OF ACTION AND INFLUENCE IN EDUCATIONAL INSTITUTIONS IN RIO DE JANEIRO

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Brazil

INTRODUCTION

Teacher-student interactions in classroom happen around conflict, as any other social encounter. Despite the great impact among educators of new pedagogies which try to recognize other subjectivities, the school universe is still characterized by a strong trend towards conformism and the avoidance of conflict, under its different forms, and there exist very little space on this scene for other ways of negotiation and elaboration of social differences. Even so, the number of students complains about the way to perform the leadership practiced by teachers has grown, as well as those concerning the conducting of school work, and teachers who are not able to keep the attention and discipline of students during school activities are being more and more criticized too - this results in a great challenge for the training of educators and school improvement. To understand such processes and phenomena of educational interaction, it would be necessary to consider them as ways of action and social influence, which have been studied for a long time by psychossociologists. That is, it seems that there is a certain awareness that students and teachers need training for minority action and the role of interaction rhetoric and negotiation of conflict, to cope with either individual or group intervention - which includes a better knowledge of social partners and relevant speakers, their goals and forms of action.

Recent works have shown how is the functioning of social life in classroom is centered around conformism, even when just external and, almost always, distributed by group indiscipline of students and lack of commitment of teachers (Passos. 1995: Souza Filho and Beldarrin. 1996: Souza Filho. 1996b). Therefore, complementary combination between externally well-behaved students and a teacher not involved with his work, ways to derine problems and modes of coping with them would differ socially, mainly around inequalities between students and teachers, in terms of informational and institutional power (French and Raven, 1959; Bourdieu, 1979), and playing a social role of a certain ascendancy and social importance - forms of power more related to the functioning of organized societies with certain stability and social consensus, despite some complains and dissatisfaction of teachers (Campos, 1993). In this way, the following forms of social influence exist, within a functionalist perspective (French and Raven, 1959) use of reward and punishment, legitimacy (or congruency) and Competence (special experience or knowledge). Trying to clear up the influence and changing phenomenon. Kelman (1958) puts stress on the fact that not all the contents are internalized by the target subject when the agent of influence uses power to convey proposals in submission lies the way to get reward and avoid punishment, while identification to set up a relationship with a person (or group) taken in his role or as a complement, as to be wise-ignorant, idol-idolatrous, etc.: the content of the proposal may be admitted but secondarized, because it would mean to comply to establish and to keep the longed-for relation. In case of internalization, influence would happen because the content is intrinsically valuated by the target subject, and congruent with values previously existent or even adequate to the satisfaction of a need.

Trying to know the roots of the social change outside the models which presuppose the importance of resources (power, for instance), internal or external, symbolic or material. Moscovici and collaborators (Mosocvici, 1976; 1985) have from the influence.

One of the first conceptual elaborations of the same authors was the style of behaviour, emphsizing especially, the consistence and flexibility of the social subject, as an important dimension of social change. The first style refers to coherency, a mode of communication which indicates some kind of organization able to bring even the mere repetition of a message even outside of the cultural patterns, such as to say that the color blue is green, could provoke a certain impact and social change. Flexibility, in turn concerns the message presented during the interaction indicating that the subject intend to accept the other until a certain point, and without affecting its own position. Such observed social effects turn out to redefine the models of influence. In a world marked by differences, it seems to be necessary to break a certain blockage and rigidity from partial mutual recognition.

The other ways of seeking influence do not depend on the use of power and its variation, implicate in conflicts between the parts involved, as when they propose not legitimated social content or-even- when it is not compatible with the current norms and ideologies, more or less explicitly. In this case, the change, when it happens, produces an authentic psychosocial genesis (Moscovici, 1980), in the sense that it affects the target-subject mostly on an internal, subjective level, even when it does not lead to direct and conscious public expression. As we know most of the information and content conveyed by schools have already been recognized, thus we can suppose that the exchanges there happen in an universe where the functionalist models are able to explain a good deal of what is occuring, since the simple anomic deviance does not constitute a "problem", control and the use of power being enough to restore order. The necessity of the use of the genetic model arrives when teachers and students start to refuse respect to the constituted norms and legitamcies and initiate one type of interaction, whether by proposing the counter-norms or others not socially existent. Even in the case of not having noticed reivindications, proposals and projects from students directly related with the making of pedagogy in schools, we know that the culture to which they belong produces its own symbols, practices and shares realities, usually discrepant with those existent in the educational realm within the student group, one minimal quantum of mutual recognition being necessary on both parts to the constitution of a common culture. Besides, we know that there are teachers who have adhered to psychopedagogic movements of Marxist and phenomenological orientation (Gadom, 1995. Rezend, 1990. Respectively), for example, which emphasized more the seeking of subjective, social, cultural and historical determinants for the formation of knowledge and education, as well as for the personal preparation and synthesis to them, to the detriment of what the institutions have practiced and/or requested until recently, provoking the emergence of dilemmas for teachers (Billing, 1988), in the sense of having to cope with ideologies and notions relatively incompatible in the daily routine of pedagogic activity, as to believe in a more personalized teaching and at the same time to have to teach to an overcrowded classroom, among others. In this sense, it is worth remembering that we have not yet seen a divergent movement for change in schools such as those that happened in France after the French Revolution, able to alter significantly the panorama of education, the innovative proposals stemming from society tending as usual, to generate isolated experiences or being "rehabilitated" and modified by the State and Business, surviving in a diffuse way and less able to cause bigger social impact to be developed ulteriorly (Souza Filho, Canabrava andBeldarrain, 1996).

We could suppose that the student before the academic power enjoyed by the teacher in "traditional" schools - whether in the sense of considering the holder of universal formal knowledge as well as being able to sanction/reward the academic activities of the student - will tend to represent the inadequate behavior of the teacher, mainly, in terms of authoritarianism, personal and group aggression. Besides, the student from the same school will tend to emphasize the pedagogic itself and other themes related to the teaching performance, like being committed to the work. In reality, we believe that the teachers and students representations develop in a reciprocal way in a dialectical-complementary process, in the sense that, even when they do not correspond to differentiated actions and forms of influence differentiated stemming from minority and majority positions (Papastamou, 1979) in the educational context, they emerge basically from direct interaction and perhaps being very marked by the small space available to social creativity to other themes outside the restricting institutional agenda. In this sense, the rhetoric frequently developed by students to oppose the domination of the teacher is usually based on "non-behavior" such as the lack of attention, distraction among others, before becoming indiscipline in itself. However, we could expect that the recent democratization within the human relationship in several spheres of life especially at the microsocial level to the point of some authors starting to talk about the increasing of horizontality (Chombart de Lauwe, 1983) - of social communication on an equality basis - giving rise to forms of group dynamics in which the action uses new ways of collective pressure, like developing a group awareness, etc. Even so, it is impossible that those forms of individual interventions still have some major role simply in the sense submiting to the academic authority, that is to try to adapt and dialog at the interpersonal level with the teacher to keep a certain self-esteem but complying "actively" with the institutional norms.

We know that the progress in interactions in classroom and in institutions of education depends on the possiblity to set up at more democratic climate in which all the parts involved could express themselves freely every time they want. The expectancies of change originated from the mutual intervention would be a good indicator of defrosting in this process of interaction, unfortunately very marked by the past when the hierarchy, the norm, the discipline and the "blind" respect to the institutional knowledge were overhelming. In this sense, we could say that the teachers individually and collectively have already been affected by the dessacralization of knowledge which along with the discredit of the education offered and political instability have led to the increasing of their social fragilization, they started to feel menaced, not only by the institutions in which frequently they feel a direct and problematic confrontation with the established educational rules.

Taking into consideration what we have said above, we could suppose that the teacher pressed from the "top" and from the "bases" makes use of several forms of power whether those offered by the institutions or that mobilized outside the school such as parents and family authorities. However, it is possible that today there is still some type of belief in persuasion/discussion by using rational arguments to modify the behavior considered inadequate to academic "good functioning", mainly at the micorsocial level in the interaction in the classroom. We know that a historical combination of these two forms of influence happened over the last few centuries which has lost recently its efficancity, view of the socio-cultural and political changes mentioned above. That is, the type of influence adopted by teachers, above all, does not succeed in producing identification among students and teachers, not even teaching fully related to the internalizations of informative content, mainly in the public school which works precariously, without equipment or up to date personnel.

Lastly, we could expect that both groups will tend to ignore a good deal of the subjective life outside the institutional *hic et nunc*, that is, needs, aspirations, and projects (Chombart de Lauwe 1969) - which would allow us to say that this mutual knowledge is lacking for an adequate participation in the context of education in intergroup terms.

Within a historical context unfavorable to social change, schools keeps working in Brazil and in many countries with difficulties giving rise to forms of mass behavior like depersonalization, loss of orientation, impulsiveness, among others, leaving the possibility to search for interaction which could facilitate respect for differences and incorporation of proposals of the communities to the academic programs and activities (Sa. 1990: Souza Filho and Beldarrain, 1996).

We could summarize the objectives of this investigation as follows:

a) To Observe Behavior Considered Reciprocally Inadequate For Teachers And Students In Classroom, Aspirations And Projects For Education Among The Same Groups.

b) To Observe Forms Of Action And Influence Adopted By Students And Teachers To Face Problems Of Educational Behavior And Expectations About Its Effectiveness.

Method

subjects

44 teachers and 94 students from five institutions of public and private teaching institutions dedicated to the training of teachers in Rio de Janeiro participated in the investigation. The average age of student was 20.37 years and that of the teachers of 33.34 years.

Instrument and procedure

A questionnaire was elaborated and applied a questionnaire which tried to observe the behaviors considerated inadequate for the functioning of the academic activities of students and teachers, according to the reciprocal evaluation of each group. Besides, they were asked about the way adopted to cope with inadequate behavior of both groups, experiences of reactions, aspirations and projects, role of education and inadequate behavior of student but considered otherwise by themselves.

The questionnaires were applied in the teaching institutions according to agreement with school authorities in order to collaborate with the research. In general, the questionnaires were well received by the groups.

Results

The behavior of teachers considered by students as most inadequate was categorized according to the contents exposed in table 1 below.

Table (1)
Frequencies and percentages of the behavior of teachers considered inadequate by students.

	f	%
Intergroup hostility	47	28.14
Lack of commi	43	25.74
Content/form	25	14.97
Interpersonal hostility	21	12.57
psychopedagogic	18	10.77
others	13	7.78
	167	100.0

As intergroup hostility we gathered contents like abuse of power, labeling of student (in general), lack of commitment, ignoring difficulties and not making an effort: content/form, not knowing how to explain, excess of academic content, interpersonal hostility, personal aggressively, giving privileges to a student: psychopedagogic interaction, not consulting students about difficulties, among others.

The ways of coping used by students before the teacher's behavior considered inadequate are exposed in the table 2, which follows:

Table (2)
Frequencies and percentages of the ways of action used by students to cope with the inadequate behavior of teachers.

	f	%
Individual passive	41	45,55
Individual active	23	25.55
Group solidarity	12	13.33
Support of powerful subject	10	11.11
others	4	4.44
Total	90	100.0

The ways of coping were considered individual passive, in contents like observing, waiting for others to do something: individual active, asking for a better explanation, trying to do things quickly, group solidarity, to make colleagues aware; support of other subject, alerting the administration of the school, other teachers; others, without problems, everything O.K., among others.

The expectancies of students regarding the reactions of teachers about their ways of coping are the ones indicated in the table 3 below.

Table (3)
Frequencies and percentages of students' expectancies regarding reactions of teachers related to their action.

	f	%
No intention to change	39	34.21
Want to change	28	24.56
No intention	18	15.78
Student change	11	9.64
Institutional change	10	8.77
others	8	7.01
Total	114	100.0

The expectancies of students about the reaction of teachers before their effort of action were no intention of change; want to change; no intention, no motivation; student change, student should learn before; institutional change, they can repeat the academic content.

The aspirations and projects of teachers about their profession according to the students are exposed in the table 4.

Table 4
Frequencies and percentages about aspirations and projects of teachers according to students.

Themes	f	%
Never thought/no answer	38	37.25
Personal aspects	29	28.43
They do not have plan	16	15.68
Social importance	11	10.78
Better salaries for teachers	8	7.84
Total	102	100.0

The examples were never thought/no answer, no answer, do not know; personal aspects, they think only about their self-image; they do not have plans, lack of goals; social importance, to change Brazil: better salaries for teachers, they are frustrated with the salary.

The role of education in the life of students was represented by the contents in the table 5.

Table (5)
Frequencies and percentages about the role of the education for students.

Themes	f	%
General importance to the person	39	33.91
Success/social mobility	35	30.43
Knowledge/information	23	20.00
Critical consciousness	11	9.56
Difficult academic task	4	3.47
Others	3	2.60
Total	115	100.0

The examples were: general importance to the person, very good, important, funny, nice, success/social mobility, to be respected, useful for the future; knowledge/information, to become someone cultivated; critical consciousness, help to understand my place in society, understand my rights and duties; difficult academic tasks.

The behavior inadequate to students but considered otherwise by them was exposed in table 6.

Table (6)
Frequencies and percentages of the behavior of students considered otherwise by them

Themes	f	%
recreation	31	27.43
Non-involvement	31	27.43
Interpersonal hostility	23	20.35
indiscipline	13	11.50
Indiscipline to change	8	7.07
others	7	6.19
Total	113	100.0

Some examples: recreation, spare time, to talk; non-involvement, stay quiet, not interested, interpersonal hostility, to be rude with the teacher; indiscipline, to be ironic; indiscipline to change, someone helping the others, among others.

Table 7
Frequencies and percentages of the behavior of students considerate inadequate by teachers

Themes	f	%
Social hostility	33	37.93
Non-committed	31	35.63
Group indiscipline	12	13.79
Individual indiscipline	11	12.64
Total	87	100.0

The teachers considered the following contents as inadequate behavior of students: social hostility (to the teacher/student), aggressivity to a colleague and teachers; non-committed, not participating in activities, apathy; group indiscipline, talking during the class; individual indiscipline, entering and leaving the classroom, among others.

Table (8)
Frequencies and percentages about ways of action of teachers to cope with inadequate behavior of students

Themes	f	%
Asking for silence	21	33.33
Professional improvement	19	30.15
Using institutional power	16	25.39
Support of powerful subject	7	11.11
Total	63	100.0

The teachers usually avoided the problems indicated above by asking for silence, appealing to resume the subject; professional improvement, working in groups with texts interesting for them; using institutional power, sending someone outside the classroom; support of other powerful subjects, calling the parents depending on the case.

Table (9)

Frequencies and percentages about expectancies of the teachers regarding the reactions of students

Themes	f	%
Do not know/do not succeed	19	38.77
Always succeed	13	27.65
Sometimes succeed	8	17.02
It is slow	8	17.02
Total	47	100

The expectancies of teachers about the reactions of students regarding their attempts to change were: do not succeed; always succeed, they apologize and try to be interested in the class; sometimes succeed, 50% improve and the others give up studying; it is slow among others.

Table (10)

Frequencies and percentages of the aspirations and projects of students according to the teachers

Themes	f	%
Do not know/do not have	19	38.77
Professional competence	12	24.48
Non-especific	10	20.40
Social mobility	5	10.20
Academic improvement	3	6.12
Total	49	100.0

The aspirations and projects of students for teachers were: do not know/do not have, they have no ideal, their parents influence: professional competence, they want to be good professionals: non-especific, I always try to give them new visions: social mobility, integration in society: academic improvement, small groups of students and computers.

The role of the profession of the teacher in the life of the teachers in general was represented in the following way:

Table 11

Frequencies and percentages about the role of the profession of teachers according to themselves

Themes	f	%
Wide social role	22	28.57
Important for the student	21	27.27
Teach/learn	17	22.07
vocation	14	18.18
others	2	2.59
Intends to change of profession	1	1.29
Total	77	100.0

The examples of the thematic categories used by teachers to express the role of their profession in their lives as follows: broad social role, to form critical citizens, consciousness, to be able to interact in the reality where they live; role for the student, to give their knowledge to students; teach/learn, learning with students, to orient the students for their day to day life; vocation, very important, I like my work very much.

Discussion

Before starting the comments it might be necessary to remind you that the objective of this study was to assess important elements in the phenomenon of social life in school, in terms of the forms of action and influence used to solve problems caused by inadequate behavior both of teachers and students, reciprocally considered.

The previously presented results suggest clearly that students and teachers were living a deep crisis in their educational interactions in all the institutions studies. The opportunity of the investigation has served to express an almost generalized dissatisfaction of subjects concerning the points of relationship and that of subjectivity (representations aspirations, projects) of each group considered. But the results also indicated regularities in the way students and teachers see themselves and each other.

One first observation about the students has shown hypersensitivity regarding the areas of performance of the teacher, considering the intergroup and interpersonal aspects of power and its use, which are very important in the evaluation of the teacher, to the detriment of those aspects related to the pedagogic *metier* in itself; as such the didactic and psychopedagogic content and the commitment to the work. In this sense, even though sensitive to the social relationship, among students thane was a certain tendency to public passivity, which appeared combined with the search for support of powerful subjects in the institution. That is, there was something like a bipolarization of attitude or way to face teachers, one active part trying to act individually and in group through the search for support and solidarity of colleagues and the other part only behaving as spectator or awaiting the action of others.

The teacher, in turn, tended to stress more social hostility followed by lack of commitment of the student, group and individual indiscipline mentioned. We might wonder to what extent the student aggression, which may be directed towards their peers and is mainly represented as directed to the teacher, might not be the result of the difficulty of the school situation not being able to offer meaning and goals to solve educational problem faced by students. We know that different studies about the expression of social hostility have been made by several authors. Remembering the works of Dollar et al (1939), who emphasize the role of frustration motivating the event of frustration. After the works of Berkowitz (1972) about the cognitive instigation necessary to arose aggressivity, Tajfel (1978) insisted on the importance of the social legitimacy for the manifestation of hostility to occur. In that case, we could think both that that hostility in classroom became socially relevant, and the feeling of the illegitimacy of the use of power by teachers grew among students. The data refering to the forms of action mentioned by both groups to face the problems that arose will allow a better understanding of the phenomena in focus.

Then, in terms of action the group option was less commented as than we might expect, affecting its social impact. We know that one of the forms of influence with more potential to the minority subjects is consistence, which could manifest in terms of the logical argumentative capacity or even the repetition of an interndividual behavior (Moscovici, 1976; Souza Filho, 1991). Therefore, in the case of subjects who defend unrecognized conceptions/ideological positions, it would be the possibility of behavior, in the sense that more than one individual proposing the same idea would provoke more impact than one isolated, which was the case of the students observed. The teachers, in turn, oscillated between forms of professional improvement and the use of power. In some cases, however, they tried to recognize the socio-cultural reality of the student but, mainly, they have used more or less soft forms of power derived from their position of informational institutional authority. It is possible that the frustration to the students was mainly the result of the expression of power on the teachers part, regardless of any other sources of problems. However, such a fact should be complemented by the expectancy observed among the students that, in case of trying to change teachers, only 24.56% would be successful. Then we could conclude that the students were very affected by a feeling of inquiry and illegitimacy before the teacher and simultaneously by the belief they could not change anything of the lived situation, therefore accumulating a considerable dose of frustration to be canalized socially inside or outside school. While the teacher investigated tended to present an expectancy of a little more success before the students regarding their actions and strategies of influence.

We could, on the other hand suppose that the high rate of students considering the teachers as having no intention to change, as well as teachers supposing slow, sporadics or no results implies a certain rigidity in the representation of the inclination to negotiation, constituting a consensus. Incidentally, students and teachers tended to ignore reciprocal projects and aspirations, as if there was no communication between the groups, a barrier impeding mutual knowledge and, what it is more important making it difficult for social identifications to emerge among students who would like to become teachers. That is, even living in a more and more difficult social situation, close to a minority condition, the teachers showed themselves to be more inclined to adopt a strategy of majority influence, which would hinder a possible “alliance” with students. It is a question of searching for supragoup goals (Sherif and Sherif. 1979), in order to gather both groups of subjects, could happen in a short term, in day to day activities, from awareness rising about the necessity complementation between the groups for the accomplishment of common tasks and, in a more permanent way, sharing social representations and ideologies, which can only possibly occur with one joint work that includes social identities stemming from a real or imaginary participation in social groups, such as religious, political, ethnic, place of living, class, and so on. All these spheres of life could generate symbolic and social content to be shared in terms of social identities, despite the difficulties of intergroup integration that we found.

Besides, in comparing the identifications of indiscipline presented by the two groups, we noted some coincidences and divergencies of conceptual and numerical importance. In terms of coincidences, they concerned the non-commitment regarding the academic activities, interpersonal and intergroup relationship (student/student and student/teacher hostility); the discordances were the recreations and indiscipline to change (these being practically ignored by teachers), defined by teachers indiscipline. That is, teachers and students knew each other in those “hot” aspects of the classroom and institutional relationship, which usually to disturb social life, especially in terms of manifest hostility, when disaster is installed, that is, where we do not know what is the main causes of them are. So the need of recreation appears as the most important reason for the students, which clearly was not recognized by teachers. How to understand such a result? It seems that the conception of the teacher about their activity not incorporating ludic and unconscious aspects present in any other human situation, stressing mostly those rational and individual aspects, have undermined the educational situation. It is not a question of transforming the classroom into recreation but of giving more opportunity for the expression of symbolic/behavior linked to the group identity of students and teachers, possibly more centered around informalities. In this sense, it would be interesting to adopt some kind of group experience in group dynamic, to dramatize the social power should be elaborated and eventually replaced by other forms of negotiation of the group's goals and procedures.

Such a picture suggests that it is possible to do something to improve communication, working point by point on the sources of dissatisfaction of each group.

Concluding, we could say that the teachers interviewed were too centered around their tasks, polarized in one unfavorable attitude towards the students, who tend to represent them in direct confrontation with teachers. It is possible that the use of personal and institutional power produced or made such a state worse, because teachers, to the students, showed little intention to change their way to perform. Even so, most of the answers going in the direction of searching for social recognition, perhaps as a way to compensate for the difficulties faced and frustrated accomplishment of communication with students frustrated, besides those related to order.

References

Bardin. L. (1992) L'analyse de contenu. Paris: Presses Universitaires de France.

Berkowiz, L, (1972) Frustrations, comparisons and other sources of emotion arousal as contributors to social unrest. Journal of Social Issues, 28, 77-91.

Biling, M. (1988) Ideological dilemmas-a social psychology of everyday thinking. Londres: Sag.

Bourdieu, P. (1987) Raproducao cultural e reproducao social. In: S. Miceli (Org.) A economia des trocas simbolicas. Sao Paulo: Editora Perspectiva.

Chombart de Lauwe. P.H (1969) Pour une sociologie des aspirations, Paris: Denoel Gonthier.

Chombart de Lauwe, P.H. (1983) Oppression, subversion and self-expression in daily life. International Social Science Journal, 96,353-365.

Campos, V.L.S.L. (1993) Causas do desanimo e abadono de professores des series iniciais de ensino fundamental – representaccao social. Dissertacao apressentada na Universidade do Estado de Rio de Janeiro.

Dollard, J., Doob, L, W., Miller, N.E. Mowrer, O.H. e Sears, R.R. (1939) Frustration and Aggression. New Haven: Yale University Press.

French, J.R.P. e Raven. B.H. (1959) The bases of social power, In: D. Cartwright (Org.) Studies in social power (pp. 118-149) Ann Arbor: University of Michigan Press.

Gadotti. M/ (1995) Concepcao dialetica da educacao – um estudo introdutorio. Sao Paulo Cortez Editora (9ªedicao).

Kelman, H.C. (1958) Compliance. Idnetification and internalization: three processes of attitude change, Journal of Conflict Resolution, 2, 51-60.

Moscovici. S. (1976) Social influence and social change. Londres: Academic Press.

Moscovici S. (1980) Toward a theory of conversion behavior. In: Berkowitz (Ed.), Advances in experimental social psychology (Vol. 13), New York: Academic Press.

Moscovici S. (1985) Social influence and conformity. In: C. Lindzay e E. Aronson (Orgs), Handbook of social psychology (Vol. 2,3ªedicao) (pp. 347-412). New York: Randon House.

Pass.V.M de. A (1995)

Papastamou, S. (1979) O professor do curso de magisterio: sua concepcao ser professor e a pratica produzida. Dissseracao de mestrado apresentada na Universidade de Brasilia.

Rezende. A.M. de (1990) Concepacao fenomenologica de educacao. Sao Paulo: Cortez Editora ed Editora Autores Asscociados.

542

Sa. C.P. (1990) Representacoes sociais da escola publica em uma favela do Rio de Janeiro. Trabalho apresentado no III Simposio Brasileiro do Pasquisa e Intercambio Cientitfico em Piscologia. Aguas de Sao Pedro.

Sherif. M. e Sherif. C.W. (1979) les relations intra-et intergroupes, analyse experimentale. In W. Doise (Org.) Experiences entre groupes. Paris: Mouton.

Souza Filho, E.A. de (1991) Acao catolica divergente e sua influencia social – um estudo de caso. Sociedade e Estado, 6, 151-159.

Souza Filho, E.A de (1996a) Estrategias de medidas em de conteudo. In L. Pasquali (Org.) Terra e metodos de medida em ciencias do comportamento. Brasilia: NEP/Laboratorio de Pesquisa em Avaliacao e Medida/Universidade de Brasilia pp. 319-339.

Souza Filho, E.A. de (1996b) Professores em interacao social – modelos de autoridade e influencia social em educacao. (in preparation) Faculdade de Educacao. Universidade Federal do Rio de Janeiro.

Souza Filho, E.A. de e Beldarrain, A, (1996) Vida social em sala de aula – representacoes e interacoes. Faculdade de Educacao. Universidade Federal do Rio de Janeiro.

Souza Filho, E.A. de Canabrava A.P.B.e Beldarrain, A. (1996) Propaganda politica atraves do radio nas eleicoes gerais de 1994 no Brasil: modelos de influencia social. Faculdade de Educacao, Universidade Federal do Rio de Janeiro.

Tajfel. H (1979) Intergroup behavior I – indiviualistic perpectives, In H. Tajfel e C, Fraser (Orgs) Introducing social psychology. Londres: Penguin.

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THE COOPERATIVE SCHOOL PROJECT AT KAYE COLLEGE, BEER-SHEVA: A STORY OF PARTNERSHIP AND PROFESSIONAL GROWTH

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This paper is about a story of partnership-in-the-making, between The Kaye College of education and Four elementary schools in Beer-Sheva.

The project came into being two years ago, as a result of two factors:

1. A growing feeling of dissatisfaction in the department of teacher education for the elementary school, from the existing system of practicum, and a growing understanding of the direction we preferred - that of partnership relationships.
2. Grants that were available by the ministry of education encouraging joint projects between municipal schools and the college of education, for the purpose of improving the schools' academic achievements and prestige (The project of the 30 settlements).

Goodlad, (cited in Clark, 1988) names three conditions required to support collaboration:

1. The partners need to have a degree of dissimilarity.
2. The goal should be mutual satisfaction of self-interests.
3. Each party must be selfless enough to assure the satisfaction of these self-interests.

In our story, we needed the cooperation of the schools for the purpose of practicum reform, as much as the schools needed ours, for their professional development.

Our concept of teacher- education is grounded in the constructivist approach that views knowledge as personally constructed and reconstructed, in the mind of the knower. Contrasting with the didactic view held by many teachers, that students entering a classroom are empty vessels to be filled with knowledge, the constructivist view of students is that they already possess knowledge and beliefs about the content and skills to be learned.

The process of knowledge- construction through the experience of practicum, is possible, says Schon (1987) " within a learning environment that enables freedom to learn by doing, in a setting relatively low in risk, with access to coaches who initiate students into " the tradition of the calling" (Dewey, 1974) and help them by " the right kind of telling" (Dewey) to see on their own behalf and in their own way, what they need to see. "

Following this concept, we, the department of teacher education for the elementary school at Kaye College, invited four elementary schools in Beer-Sheva to cooperate in building a new school-college-partnership around the issue of student-teachers practicum, in order to practice and study the experience of learning by doing, and the artistry of good coaching (Schon 1987) .

We thought this was a rare opportunity to start building a different system of mutual, collaborative relationships between the college and the schools, on the basis of partnership, in the framework of Cooperative Schools (also called: Professional Development Schools).

On Cooperative or Professional Development Schools

The Holmes Group (1990, p. 1) defined the Professional Development Schools as: "Schools for the development of novice professionals, for continuing development of experienced professionals and for the research and development of the teaching profession" . They argued that: "it is likely that components of the educational system cannot be changed in isolation from each other," and their inevitable conclusion is that "change requires a holistic, long-term, collaborative effort between public schools and schools of education for the purpose of improving both". (1986).

The growing list of reports and articles dealing with PDS is an indicator of both the phenomena and its growing influence and recognition in the field of teacher-education.

Most of the published material, as both Ziechner (1992) and Winitzky Staddot and O'Keefe (1992) point out, is dealing with the process of building such schools and the difficulties involved in the process.The general view is that: Schools are attracted to these partnerships because they like the idea of working with the universities. Being involved in such partnerships, then deepen their understanding of the problematic nature of teacher education, and of their possible role in it. Working with the academia open their eyes as to the professional practical knowledge they own and use in their practice, which they formally considered intuitive. This self consciousnstrengthen the professional identity of the teachers and their ability to articulate their educational views and make their voice heard in public. This partnership contributes to a better understanding of the differences between the role of teacher educators and mentor teachers. The pedagogical counselors can redefine their role to include working with school teachers and principals as well as organize and mediate the practicum program. This partnership could open a whole new area of research in teacher education as it feeds both theory and practice of teaching and teacher education.

There is very little research, as yet, on the contribution of PDS to the practicum of student teachers. We think this is not accidental that most writing on the subject so far, concentrate on the building of this learning environment, and not on the effect it has on the learning process of student-teachers. Since the locus of reform has broadened to include the educational system, not just the individual classroom-teacher and student, (Winitzky Soddat & al, 1992), it would be wrong to expect any change in the practicum of student-teachers separate from the overall development. It seems that the reason why research literature is still preoccupied with the process of building PDS instead of moving on to examining the effects it has on teacher education, has to do with two key concepts: **partnership and collaboration**.

Partnership schools can easily turn into what Calderhead (1988) describe as: "partnerships that are often not more than casual acquaintances with no mutual understanding of the role and contribution expected of each of the partners. In these cases the partnership is usually the result of an economic or administrative necessity rather than a real pedagogical commitment to an idea."

"Collaboration", argues Stanulis (1995, p.132) "is not a natural aspect of a school culture. A more common culture is isolation, a culture that encourages teachers to keep their wisdom tacit rather than shared with others in the school community." From our experience, Collaboration between school-teachers and techers of teachers is no different. Pedagogical counsellors often tend to impose plans and pedagogical concepts on the schools, the top-down way. Creating an authentic, dialogic community of learners could be a complex purpose, as it often is against inner beliefs and attitudes that the participants bring with them into this process.

On the road to partnership and collaboration - a long distance walk.

A partnership that is characterised in terms of: ' mutual understanding of the role and contribution expected of each of the partners' can not be taken for granted. It has to gradually develop.

This Paper presents a story Of Partnership- in- the making'. It Tells About steps towards partnership and collaboration between one college of education and four elementary schools, with four school principals, about twenty teacher-mentors, about fifty student-teachers, three pedagogical counsellors, a coordinator of the college program, and an evaluator of the process.

As we entered into partnership with the schools we had some ideas as to how we wanted things to look like. However, we were just as determined that we do not see ourselves as intervening elements that come into the school to dictate, from an expert's stance, how things should work. We were seeking partnership with the school teachers because we believed there was a world of practical knowledge about teaching and learning in the elementary class, that has been accumulated in the school, by professional practitioners who usually express it by doing and less by verbal articulation (Connelly, 1994, Elbaz, 1983).

"The dilemma is clear." write Winitzky Soddat & al, (1992): "If we wish to remain true to our standards of practice, and to use state-of-the-art knowledge about instruction and teacher education, we must persuade PDS faculty of its utility, enable them to change, and place the responsibility for change on them. On the other hand, if we are to adhere to values of collaboration, Programmatic democracy, and community, values that we and the Holms Group hold, we must be open to teachers' views." (p.8-13)

Our pedagogical concept was grounded in the contstructivist theory of learning (Dewye,1974, Schon, 1987, Britzman, 1991) It called for a dialogue within a). non-hierarchal community of learners. We wanted, for example:

1. That student-teachers experience teaching in real school situations as an important part of their learning process, and be exposed to the school as a whole and not just to one classroom.

2. That the students construct their learning out of their practice in a non-hierarchal learning environment with acceptance end tolerance to mistakes.

Our purpose was to develop with our school partners a professional community of students, teachers and teacher educators who have turned reflective critical study of their work into an ongoing practice, and who were committed to share their thoughts about teaching, in a reflective, critical manner, with each other, as partners to a collegial dialogue.

We were soon to learn that this attitude contradicted other approaches to teacher education such as the 'Apprenticeship Practicum approach' or the 'Applied Science Practicum Approach' (Zeichner, 1993), on which all of us: students, and pedagogical-councellors where brought up.

So, while aiming at building a new practicum environment in the school, for students of education, the first phase of our work concentrated around the development of a sincere basis of partnership between the school's teaching staff and ourselves, the college teacher educators. We had a three fold goal: 1. To commit ourselves to critical self-examination of .previous beliefs about learning and learning to teach, as active participants in a professional community of learners. 2. To find a way to share some of our basic beliefs and pedagogical assumptions with the school-teachers. 3. To stay open to the teachers' practical wisdom and pedagogical knowledge in our ongoing dialogue with them, on issues of teaching and learning in general, and on teacher education in particular.

No one-shot workshop could have done the job. We decided to set out together on a long –distance walk, "study the experience of learning by doing, and the artistry of good coaching " (Schon, 1987), and discover, along the way, about each other's tempo, strength, individual preferences and needs.

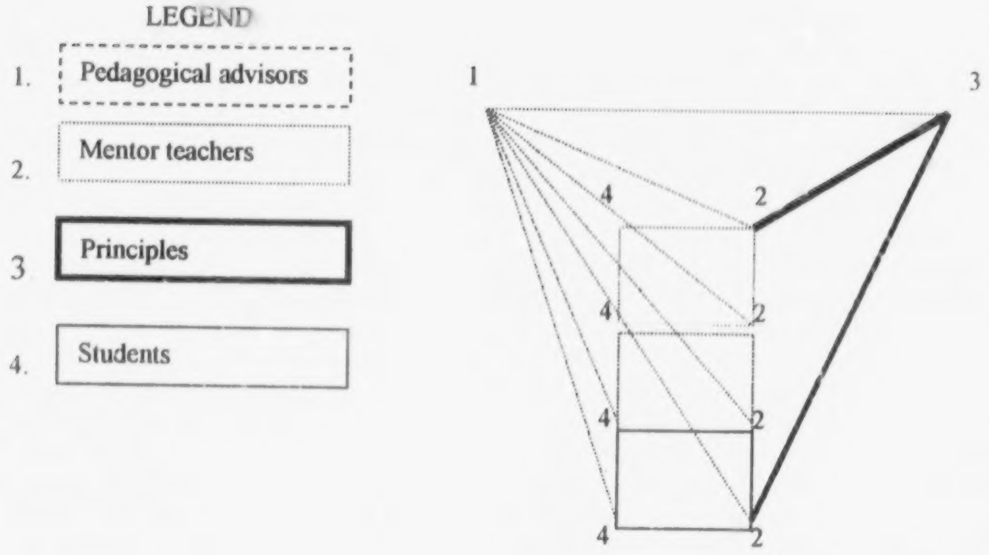
The pedagogical counsellors, each in her own way, took upon themselves to coordinate the walk and take care of the well being of the participants. Using a driving metaphor we could say that they were the steering wheel s of our cars - attached to all other wheels they coordinated the joint movement of the different participants on the road.

There was no linear direction of knowledge growth but a reciprocal movement, back and forth between partners who were both learners and teachers . There was recognition of expertise, of task and of the accumulation of practical wisdom, but also an invitation to raise questions and light hidden aspects of practice, through reflection and wondering.

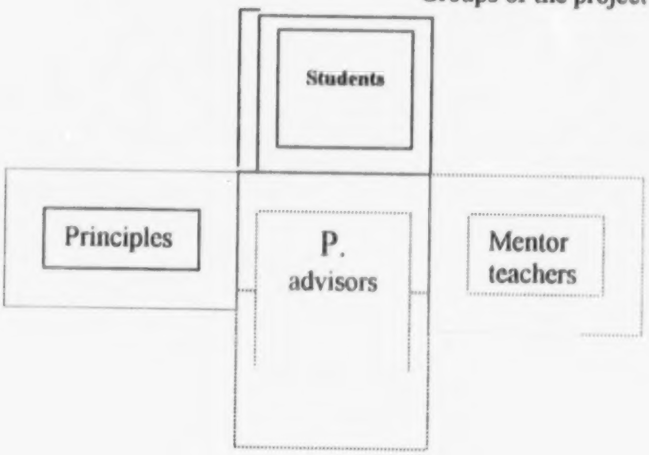
The models on the next page describe the role of the pedagogical counsellor in facilitating these circles of interaction between the various learning groups.

Models of Partnership- The Kaye College Project of Cooperative Schools

Interaction of Partners Within .1
A School System


LEGEND
1. Pedagogical advisors
2. Mentor teachers
3 Principles
4. Students
1
3
4
2
4
2
4
2
4
2

The different Learning Support .2
Groups of the project


Students
Principles
P. advisors
Mentor teachers

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1. **Interaction of partners within a school system**: (all meetings are held in school within working hours)

a) Student-teacher, mentor-teacher, pedagogical-counselor.
Pedagogical counselor and school principle.
Pedagogical counselor and mentor teachers of the school, personally and in group.
Pedagogical counselor and the cohort of students.
Pedagogical counselor, school principle and mentor teachers (with or without students).

2. ***The different learning support groups of the project***: *(All planned as professional* or academic courses with cr, and held at the college).

The students cohort with the Pedagogical counselor
The four school principles and the pedagogical team as a learning and support group
The whole group of mentor teachers of the four schools with the pedagogical counselors who are working with them, as a learning and support group.
The pedagogical counselors as a professional supervision group.

'Rimon' Elementary School:

'Colour 'of the school: Whole language approach.
Student-teachers: Third year cohort (15),1-2 students per class, Two days a week.
Last year: Pedagogical counsellor was working on a weekly basis with principle and with teachers, individually and as a group. Towards the second half of the year, following the teachers' request she gave them special workshops on the computer. Cases that were brought up at the personal conferences, turned, later, into case studies for both students and mentor teachers in their group work. This year: Second year cohort (15) is practicing at the school.

Nizanim Elementary School

'Colour' of the school: whole language approach.
Student-teachers: First year students (14), 2-3 students in a class, working with small groups of pupils in large classes. One day a week.
Last year: Principle and pedagogical advisor have developed good working relationship, saw themselves as partners, planned work together and consulted each other over problems of school and practicum. Principle saw her responsibility to set an example to her teachers by taking a mentoring responsibility too, with future principles. Work with teacher-mentors was held on an individual level with the pedagogical supervisor and each of the teachers on the basis of personal needs.
Next year: plans include a more intensive work with the mentor-teachers as a group, both in school and in the college, in collaboration with the other groups of mentor teachers that work with us.

Ma'anit Elementary School

'Colour 'of the school :Integrative instruction, with an attempt to build the school's own core curriculum. A smaller group of 7 second -year students is working in the school. 1-2 students per class.

Last year: The pedagogical counsellor was working with the whole teaching staff of the school on integrative thinking in their teaching. The students joined this work. No special attention was given here to personal supervision of the mentor teachers in their work as mentors Principle was in close working relations with the pedagogical counsellor on the school's project of integrative thinking. This year: Temporarily there are only 5 students practicing, of two different cohorts. The school is nevertheless part of the larger partnership group, hoping to come back to full participation next year.

Gevim Elementary School

Colour of the school: integrative teaching and the whole language approach.
Last year: a small group of 7 student-teacher joined the school for the second semester only. This year: the third year cohort (15) is practicing in the school. This school is involved with more than 10 different projects at the same time. It is examined if the school can take upon itself, seriously the partnership project in the long run. The pedagogical counsellor has moved from Ma'anit, and is working here too with the whole school staff and her students, on issues of integrative teaching and thinking. Supervision to mentor teachers on their work with the students is still a weaker spot.

End of Part one

Looking back on our first year of partnership we could clarify the following issues and questions as preliminary criteria for the evaluation of our work:

1. To what extent are we functioning **as partners, how does it show in our actions?**
2. To what extent do we facilitate the sharing of ideas and stories of teaching in the groups?
3. To what extent does it show, in our every-day activities, that the commitment to the partnership is shared by all participants?
4. Can we start looking at the effect this project has on teacher education practicum?

As we continue with our work this year, we have become more conscious of our work. it is systematically collected and analyzed along the way by our assessment person, who is talking with all the involved participants periodically, so that by the end of this year we hope to come up with another round of insights as to our work and its future direction.

Reference

Britzman, D.P. (1991), Practice Makes Practice: A critical study of learning to teach, State University of New-York Press, Albany.

Calderhead, J. (1988), The Contribution Of Field Experience to student primary teachers' professional learning, research in education, 40, pp. 33-49

Clark, R.W. (1988), School-University relationships: an interpretive review, In K.A. Sirotnik & J.L. Goodlad (ed.), School-University Partnerships In Action, (pp.32-65) New-York: Teachers College Press.

Connelly, F.M, & Clandinin, D.J. (1994), Telling teaching stories, Teacher Education Quarterly, 21(2), pp. 145-158

Elbaz, F. (1983), Teaching thinking: A study of practical knowledge. London: Croom Helm.

Dewey J (1974), John Dewey on education: selected writings (R.D. Archambault, a.) Chicago: University of Chicago Press.

Holmes Group (1990), Tomorrow's Schools. East Lansing, MI: Holmes Group, Inc.

Stanulis, R.N.. (1995), Classroom teachers as mentors: possibilities for participation in a professional development school context, Teaching & Teacher Education, Vol 4,

Stoddart T. (1993), The professional development school: building bridges between cultures, Educational Policy, Vol. 7 March.

Winitzky Soddat & al, 1992, great expectations: emergent professional development schools, journal of teacher education, jan/feb. vol. 43, no. 1 .

Schon, D.A. (1987), educating the reflective practitioner, jossey-bass publishers, oxford

Zeichner, K 1992, Rethinking the practicum in the professional development school partnership, journal of Teacher Education Sep./Oct. Vol.43, No.4

CHILDREN'S LITERATURE-FANTASY THAT BUILDS REALITY

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Since 1993, when I undertook a discipline on children's literature studies, in the Languages Department of a Brazilian Federal University, I have been experiencing an interesting partnership between academic research and elementary schools. Sharing my investigations on literature and children's emotional life with primary school teachers, and receiving, from them, essential reports on children's school life has removed me out of the ivory tower of the University life. I could awake, then, to the importance of a permanent interchange of theoretical studies and daily school practice to educational development.

Such an experience became more interesting when I was invited by the Mayor of Ouro Preto (an important historical town of Minas Gerais, near Vicosa where I live and work) to create a project for poor children's recreation based on literature. Thus the cultural project "Playing with Words" was born.

Lack of financial resources and several changes in local policies have prevented the whole project from being implemented. However, the first programme module has been offered to a diversified audience that includes both teachers and parents desirous of knowing more about children's emotional life.

Believing in the liberating power of a project such as "Playing with Words", I think it must be made known, although it has not yet been implemented.

Besides the creation of a Public Library for Children and the production of a video, addressed to parents and teachers, on children's emotional life, the whole project consists of eight different modules divided into three distinct parallel stages. The first phase aims at forming a specialized staff that will be responsible for the programme development. The second phase includes six modules addressed to children under different ages, from first childhood to the teens. The entire circle of the project ends in a third phase when many results of the previous stages must be addressed to a more extensive public, aiming to making people more conscious of the importance of a project that prepares children to perform their future citizenship.

Many activities distributed inteight modules will be gradually developed:

1) "Education for Teaching": mini-courses (talks, panel discussions and workshops) on literature and children's emotional life will be offered in order to help teachers become story-tellers and story-writers. Target audience: adults and young people, specially elementary teachers and Education students.

2) "Sounding Cradle": addressed to little children from three to six, this module consists of a special work using lullaby songs and nursery rhymes. Exploring poetic aspects of the language (rhythm, rhymes and other word and sound plays) is a good way to make children respond to the mother language sounds and structure, preparing them for a future language skill.

3) "The Fairy Tale World": explaining children's enchantment with fairy tales, with their terrible villains and bad witches, many psychologists and psychoanalysts defend this kind of reading for children in order to create wholesome adults. Gathering children from three to seven years to listen to fairy tales and stimulating them to create their stories are some of the objectives of this module.

4) "Children are poets, too": poetry workshop for children over 7, stimulating the creation of oral and written poetic texts. Teaching children how to produce a book, showing that text creation involves several kinds of specialists such as poets, writers, book illustrators and graphical artists.

5) "Playing with Fiction": workshop for reading and creating oral and written texts encouraging children over 7 to produce a story' book on a familiar theme.

6) "Toy-Book Workshop": artisanship workshop for children between 12 and 14 in order to teach them how to make toy book-objects - cloth books, cardboard books, plastic and wooden books - as toys for smaller children to play with. Children themselves should be stimulated do create free forms and to use several raw materials to construct these dismountable books.

7) Display and sale of the products created along the different modules of the Programme.

8) Theater Plays: staging several little theater plays based on the texts created by the children during the workshops.

The best children's literature is made up of those texts that respect their intelligence, stimulating them to self-esteem and self-confidence and helping them in the construction of a meaning for their own life. In order to attract children's attention, a text must speak of themes concerning them in a appropriate language according to their maturity.

By making possible the identification between children and characters through the use of imaginary situations, literature works must give young readers support to achieve psychic maturity and social integration. In other words, give them support to construct their psychic and social reality.

Using their texts to transmit moral concepts without any reference to children's everyday lives and inner needs constitutes a strong hindrance for them to like reading. As for specific children's needs, the young reader's intelligence and sense of critique has been disrespected by some texts which only reveal some usually false adult images of childhood.

Many parents do not know how so important fantasy and plays are for children to develop a wholesome mind, at the same time giving them emotional support do get over anxieties, inward conflicts and fears. Confounding imagination and fantasy with illusion and lie adults generally do not realize the importance of imagination in the construction of a social and psychic reality.

One must be careful about having a radical opposition between reality and fantasy. They are not tight categories. But, according to several constructivist theories, reality only exists while mediated by language. As for Siegfried

Schmidt, for instance, by individual cognition process people do not apprehend the world. On the contrary, they shape the world as they experience it. The cognition process constructs reality in its own structure. The familiar references to things and facts are produced by experience. They do not exist out of the individual cognition process. Each person knows, only the world he or she has constructed by a thousand of activity pattern inputs in his or her nervous system. Self-consciousness, for instance, is constructed by operational repetitions that enable people to distinguish the outside from the inside in the cognition realm and, as a result, to make connections with the outside world.

Piaget also demonstrated how brain and the outside world are interchangeable: on the one hand, the mind structures shape and assimilate the world that, on the other hand, unchains an accommodation process. That is to say, the brain manipulates the outside reality in order to create its own independent world. Therefore, any radicalization on settling fix boundaries between outside reality and mind creations is unacceptable. By articulating Piaget and Schmidt's thought we can say that there is a permanent interchange between psychic life and the outside world during all the construction process of knowledge patterns.

As a kind of artistic expression, literature integrates the whole cultural life, of society. Like other specific artistic media, literature deal with essential questions such as life experiences, desires, dreams, anguish, fears, worries and perplexities. It seems to be a universal need for mankind to translate into symbols their most disquieting emotions.

One of the most important art functions could be compared to that psychoanalysts point out in children's plays. According to them, those plays lead children to unconsciously rethink everyday life situations, discharging their negative energy and solving emotional problems as soon as they project their own inner conflicts on the scenes they are dramatizing.

In order to permit the immediate identification and the subsequent projection of one's life experiences on the created world, every artistic expression must provoke in the receiver an intense mobilization, in that no one will be the same after such singular emotions. As the artistic communication is only completed when it reaches that mobilization level, its aim cannot be restricted to the simple transmission of informative contents. Making a great text-receiver interaction possible, the literary work must be constructed by the own reader's life experience. As a result, the reader's perception of the world becomes more complex leading him to a reconstruction of reality.

Any topic may be interesting for a child, once the language used is appropriate to the reader's age. The way children deal with their context changes completely according to the development phases they are living. Therefore the language and form the topics are treating must be different for each stage.

Mothers - who have always understood the meanings of their babies cry - many centuries ago knew this however only in the last decades, scientists have been announcing the results of several brain investigations that confirm the capability of babies to get information from their surroundings and to communicate to other people. Language input begins in this early phase chiefly by children's contact with the sounding elements emitted by their mothers. These nursery rhymes and lullaby songs carry important emotional load that encourage the baby to future language learning.

In the first years wondering sensations occupy the whole children's world. By playing children create the necessary resistance to bear daily problems and conflicts. There is an interaction between mind and environment in this gradual construction of mental and emotional structures. Association, imitation and repetition are common mechanisms of this process.

In the phase children must be encouraged to play with books as they were toys. This censorial contact with books is the first significant stimulus which will create the pleasure of reading, that perhaps will survive the unavoidable negative behavior towards reading that children may develop later, when probably they will meet adults for whom reading is but one of the most tedious things in life .

More than cathartic mechanisms, baby plays act as early efforts in the construction of a meaninfor the world. Literature also can help children to find sense to their life.

For Bruno Bettelheim, childhood is the age to learn how to construct bridges over the immense gap between inner experience and outer reality. Fairy tales offer children the fantasy stuff that shows them, in a symbolic way, the meaning of all battle to get their self-realization. These stories, when addressed to children under seven, fit their magical and animist thinking and tell them about the terrible pain they will have to suffer until victory. Children will realize that if they are brave enough everything will end well.

As self-achievement includes Id irrational impulse integration with other symbols of psychic life - Ego and Superego - children have to go a long way until they overcome the inner conflicts of growing up. Their mind interprets the shoking confrontations between bad and good characters as the own conflicts they life through their psychic world. The strain suffered by children while they are listening to these stories relieves their souls of the true tensions caused by ancestral mankind fears such as one's fear of not being loved, fear of being rejected or abandoned, fear of death, mainly parent's death, and other tensions caused by some typical problems of this age such as rivalry between brothers and Oedipus conflicts.

Many of these stories show rough ingredients; step-mothers that kill step-children, fathers that eat their children's bones in the soup, witches that give poisonous apples to children. Faced with these horrible things, parents and teachers feel themselves sorrowful. Why do children like so much this horrible trash? For a very simple reason, answer the psychoanalysts: by identifying themselves with those strange characters, they can emulate the fantasy conflicting situations of anguish and fear so that they can transfer negative emotions like anger and wish of revenge relieving themselves of their real inner tensions. "Teaching children to controll their fears by means of fairy tales protecting them", says a French psychoanalyst, Rene Diatikine.

Besides love of dread children love the heroes of the tales. The hero plays an important role which will act as a pattern of behavior for children. They are important in the construction of a strong Ego. He gives reasons to live and restore the felling of courage. Stories on heroes are vital during life's as difficult situations.

According to Piaget, the phase as concrete operations, when children develop a comprehension of relations between things and obtain notions of volume and weight as well as capacity to classify objects, begins by seven.

Actually, by age of seven children develop a more logical mind, demanding more precision from adult. Although fantasy and plays are still important in the construction of their reality, from now on they become more and more obsessed with a logical understanding of the world. Whatever an adult says will be submitted to an accurate critical analysis. More self-confident in their ability to deal with rationality and abstractions, children begin to demand more respect to their intelligence and more coherence from adults. Literature for them in this phase must mix fantasy with new ingredients. Adventure stories or texts on daily reality such as conflicting relations between boys and girls, parents separation, first love, are some of topics children will appreciate.

Soon, between 10 and 14, children will enter a new conflicting phase, when they will face other challenges such as freedom from their parents and the conquer of the opposite sex. Literature will remain as a source of fantasy matter for them to construct their reality. But then they will be young men and women. They will hate to be called children.

TEACHER PERCEPTION ON STATUS OF VOCATIONAL AGRICULTURAL EDUCATION IN MALAYSIA

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INTRODUCTION

The agriculture sector has been Malaysia's major sources of income. However, the contribution of this sector to the economy has been decline in recent years. Lack of manpower has been identified as the major contributing factor to the declined in the agricultural sector.

Agriculture has been offered at lower secondary schools, upper secondary schools and vocational schools. At lower and upper secondary schools, agriculture is offered as an elective subject. At vocational schools, agriculture is offered to students who have completed their lower secondary education. Prior to 1987, vocational agriculture education was aimed as providing students a curriculum which is vocationally oriented.

Previous studies (Lela, 1982) indicated that most of the vocational agricultural education came from low socio-economic status and preferred to worked in semi-government bodies. The reason they enrolled in vocational agricultural classes because they were interested to study agriculture. As the country developed, the school curriculum has to be changed. Changes in the type of students enrolled in vocational agriculture and their interest, background and needs suggest that agricultural educators should re-think the approaches of the curriculum (Hemp, 1980). The present vocational agriculture program is tailored toward balancing vocational and academic education to enable the students either to participate in the labor market or pursue higher education.

Purpose and Objectives

The primary purpose of this study was to examine status of vocational agricultural education in Malaysia. Specific objectives of this study were to:

1. determine teachers' perception toward the importance of skill levels in teaching vocational agricultural students.
2. determine the perception of vocational and academic teachers to toward education and training in the vocational agriculture schools.
3. determine the perception of teachers toward role of vocational education for vocational agriculture students.

Procedures

Population: Survey research methodology was used in this study. The target population for this study was all teachers who were teaching in vocational agricultural students (N=75) in Peninsular Malaysia.

Instrumentation: An instrument was developed based on a review of literature. The instrument consisted of three parts including the teachers demographic variables; the importance level of skills; perception toward vocational education and training; and perception toward role of vocational education for agriculture students. For perception statements, the respondents were directed to used 4-points and 5 points Likert-type scale respectively. The Cronbach alpha coefficient was computed for both sections on perceptions as a measure of instrument reliability. The reliability coefficient was .62 and .71 respectively.

Data Analysis: The SPPSSPC Window package was used to analyze the data.

Descriptive statistics were summarized using means, frequencies, and standard deviations.

Findings

The results indicated that there were 82.5% of vocational teachers were male and 17.5% were females while the academic teachers were 38.2 were male and 61.8% were female. The average age of vocational teachers were 33.18 years (Sd=4.93) and for the academic teachers were 30.81 years (Sd. 6.51). Eighty-five percents of the vocational teachers had a Bachelor degree, 7.5% had a Diploma, 5% had a Teaching Certificate and 2.5% had a Master degree. Twenty-six percents of the academic teachers had a Bachelor degree, 70.3% had a Diploma, 8.1% The teaching experience was 9 years for the vocational teachers and 5 years for the academic teachers.

Skills

Data in Table 1 showed that vocational teachers rated psychomotor skill was the most important skills for vocational agricultural students (mean=4.53). However, the academic teachers rated high for cognitive skills (mean=4.37). In general both group of teachers rated all skills were important for vocational agricultural students.

Teachers Perceptions

Data in Table 2 presents the mean, standard deviation and rank of 20 perception items vocational education for vocational agricultural students. As observed in Table 2, the vocational agriculture teachers strongly agreed that mathematics and science aneeded to learn agriculture (mean=3.55). Both groups agreed that rural students enrolled in the vocational agriculture schools had exposure in agriculture. Mean score for each groups was 3.15 and 3.03 respectively. They were also agreed that there should be more emphasis on science and technology in the curriculum for vocational agricultural students.

Table (1)

The Importance of Skill Levels in Teaching Vocational Agricultural Students

Skills	5	4	3	2 %	1*		Mean	Sd.
Psychomotor								
Vocational Teacher	62.5	32.5	2.5	2.5	0		4.53	0.78
Academic Teacher	47.1	44.1	5.6	2.9	0		4.35	0.73
Cognitive								
Vocational Teacher	23.1	69.2	5.1	2.6	0		4.13	0.62
Academic Teacher	35.1	48.6	2.7	0	0		4.37	0.55
Affective								
Vocational Teacher	25.6	64.1	5.1	5.1	0		4.10	0.72
Academic Teacher	34.4	53.1	9.4	3.1	0		4.19	0.74

* 1=Not Important; 2=Less Important; 3=Somewhat Important, 4=Important; 5=Very Important.

It was observed that both groups were disagreed that vocational education for agriculture students trained for blue collar jobs (mean=2.95 and 2.86) and most of the graduates worked in agriculture sectors (mean=2.79). They were also disagreed that the students had a high aspiration in education and occupation; came from low income family; their parents worked in agriculture sectors; and the graduates preferred to work in government sectors. The teachers indicated that the students did not enrolled in agriculture elective when they were in secondary schools. Both groups of teachers also disagreed that the present curriculum emphasized more on business and entrepreneurship.

They disagreed that students enrolled vocational agricultural students have interest in agriculture.

There were some variation on perception toward entrance qualification between teacher groups. The vocational teachers agreed (mean=3.03) that the present vocational agricultural students have a better Lower Secondary Examination (PMR) results than the students before them. However, the academic teachers disagreed (2.77) with the item. The item was ranked 4th by vocational teachers and 8th by the academic teachers.

Both groups strongly disagreed that train for low salary jobs; to provide not up to date skills; and for high risk students.

Table (2)
Teachers Perception Towards Vocational Education for Vocational Agriculture Students

Item	Teacher					
	Vocational			Academic		
	Mean*	Sd.	Rank	Mean*	Sd.	Rank
1.To provide training for blue collar jobs.	2.95	0.78	5	2.86	0.83	5
2. To train for low salary jobs.	1.98	0.69	18	1.77	1.02	20
3. To provide not up to date skills.	1.98	0.80	18	1.83	0.96	19
4. For high risk students	1.95	0.72	20	2.14	0.87	17
5. Graduates are working in agriculture sectors.	2.79	0.83	12	2.79	0.73	7
6. The present students enrolled in vocational agricultural school have a better PMR results than the students before them	3.03	0.73	4	2.77	0.91	8
7. There are many urban students enrolled in vocational agricultural schools.	2.98	0.80	5	3.00	0.64	4
8. Most of the students enrolled in vocational agricultural school were from rural areas.	2.10	0.67	17	2.11	0.83	18
9. Students enrolled in vocational agricultural school were those who have interest in agriculture.	2.48	0.78	14	2.54	0.78	14
1 O. Most vocational agriculture students were boys.	2.80	0.82	9	2.67	0.72	19
1 I. Vocational agricultural students have high aspiration in education and occupation.	2.34	0.70	16	2.44	0.74	
12. Most of the students enrolled vocational agricultural cultural school were from low income family	2.93	0.66	7	2.83	0.73	6

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Cont. Table (2)

13. Mathematics and science are needed to learn agriculture	3.55	0.50	1	3.03	0.5	1
14. The graduates received lower salary than the graduates from other vocational schools.	2.46	0.79	15	2.30	0.79	16
15. Students from rural areas had exposure in agriculture.	3.15	0.62	3	3.03	0.51	2
16. Most of their parents were working in agriculture sectors.	2.80	0.76	9	2.60	0.65	11
17. The graduates liked to work in government sectors.	2.80	0.76	9	2.57	0.66	13
18. They enrolled in agriculture elective when they were in secondary schools.	2.83	0.68	8	2.69	0.63	9
19. The present curriculum more toward business and entreprenuership.	2.78	0.73	12	2.60	0.65	11
20 The curriculum should be more emphasis on science and technology.	3.49	0.56	2	3.3 1	0.69	1

* 4= Strongly Agree; 3= Agree; 2= Disagree; 1=Strongly Disagree.

As indicated in Table 3, the vocational agriculture and academic teachers surves had positive perception of the role of vocational education. The academic teachers strongly agreed that the role of vocational education for vocational agricultural schools was to prepare students to be good citizen (mean=4.67). However, the vocational teachers reported that they agreed that the role of vocational agricultural schools was to prepare students to be good citizens (mean=4.43).

Both groups agreed that vocational education will help students to have a realistic plan after graduation. The mean score for this statements was 4.33 and 4.77 respectively.

The academic teachers strongly agreed that the role of vocational education is to develop solving and critical thinking skills among students (mean=4.53). Vocational teachers, however, reported that they agreed on the item (mean=4.30).

Both groups agreed that vocational education should prepare students to be a competent consumer and they were also to have opportunity to further their studies. The teachers tend to agree that vocational education was to teach students for specific skills. The academic teachers were more stronger agreed (mean=4.25, Sd=0.65) than were vocational agriculture teachers (mean=3.95, Sd=0.96). The academic teachers were also in stronger agreement (mean=4.31, Sd=0.72) than were vocational agriculture teachers (mean=4 .07, Sd=0.96) on vocational education vocational agriculture schools to prepare for skilled workers.

As observed in Table 3, two items have shown difference in their level of agreement. The academic teachers agreed that vocational education should teach basic skills (reading, writing and arithmetic) (mean=4.22, Sd=1.07), while vocational agriculture teachers uncertain on the item (mean=3.43, Sd.=1.17). The vocational teachers agreed less than academic teachers that vocational education should provide general education to students and provide job placement for students after graduation.

Table (3)
Perception of Teachers Towards Role of Vocational Education in Vocational Agriculture School.

Item	Teachers					
	Vocational			Academic		
	Mean*.	Sd.	Rank	Mean.*	Sd.	Rank
1. to be a good citizen.	4.43	0.90	1	4.67	0.48	1
2. to have realistic plan after graduation.	4.43	0.79	2	4.47	0.51	3
3. to develop problem solving and critical thinking skills.	4.30	0.76	3	4.53	0.61	2
4. to prepare to be a competence consumer.	4.23	0.83	4	4.33	0.63	4
5. to prepare for further studies.	4.03	0.83	6	4.31	0.67	6
6. to prepare for specific skills.	3.95	0.96	7	4.25	0.65	7
7. to teach basic skills.	3.43	1.17	8	4.22	1.07	8
8. to teach general education.	3.55	1.09	10	4.03	0.82	9
9. job placement after graduation.	3.60	1.22	9	3.92	0.81	10
10. to prepare skilled workers.	4.07	0.96	5	4.31	0.72	8

* *5= Strongly Agree; 4= Agree; 3= Neutral; 2=Disagree; 1=Strongly Disagree.*

Discussion, Conclusion and Recommendation

Most of the vocational teachers were male while most of the academic teachers in the sample were female. Majority of the vocational teachers had a Bachelor degree and on the other hand majority of the academic teachers had a Diploma. The teaching experience was 9 years for the vocational teachers and 5 years for the academic teachers.

Vocational teachers rated psychomotor skill as the most important skill for vocational students while academic teachers rated high for cognitive skills . In general, both group of teachers rated all skills (cognitive, psychomotor and affective) were important for vocational students. McCracken (1986) also reported that employers needed their employto have job skills as well as affective skill to be a productive workers.

The teachers perceived that mathematics and science are needed to learn agriculture. They also agreed that more emphasis on science and technology should be given in the school curriculum. Vocational agriculture curriculum must incorporate science principles to assure the credibility of programs for students to be employed in the agricultural industry (Nelson, 1985) The study suggests that improvement should be made in the agricultural education program to incorporate concepts of physical, chemical and biological science in the curriculum.

Teachers disagreed that vocational education for agricultural students was to provide training for blue collar jobs. They also strongly disagreed that vocational education was to train for low salary jobs; to provide not up to date skills; and for high risk students. Graduates from vocational agricultural schools were normally employed in the non agricultural sector. The teachers perceived that agricultural students did not have high aspiration in education and occupation and did not like to work in the public sectors. The students were not from low income family and majority of the parents were not in agriculture sector. The students were not enrolled in agriculture elective when they were in secondary schools. Both groups of teachers appear to have perception that students enrolled in vocational agricultural courses did not have interest in agriculture. This study has shown that students enrolled in vocational agricultural education today have socioeconomic background that are different from students in the study done in 1982 by Lela. Therefore, this study suggests that a selection procedure should be introduced to admit students who are interested to pursue agriculture as a career.

The teachers perceived that the present curriculum did not emphasis business and entreprenuership. The study suggests that the teacher education program for vocational teachers should incorporate business and entreprenuership courses. Similarly, the vocational agricultural schools curriculum should also incorporate business and entreprenuership courses to expose to business knowledge.

There was some disagreement between teacher groups about students qualification to enroll in vocational agricultural classes. The vocational teachers reported that the present students have better entrance qualification in PMR than students before them. The study suggests that the vocational schools should give equal opportunity to able and less able students.

In general, the vocational agriculture and academic teachers had positive perception on the role of vocational education. The teachers reported that the roles of vocational agricultural schools were to prepare students to be good citizens and help students to plan a realistic career after their graduation. The teachers supported that the purpose of vocational education is to develop problem solving and critical thinking skills among students.

Both groups of teachers supported that the role of vocational education was to teach students for specific skills and to prepare students for skilled jobs, This finding was found to be consistent with those reported by McCracken (1981) where employers suggested that vocational education at school level should emphasize the teaching of job skills.

There was some disagreement between academic and vocational teachers on the role of vocational education in teaching basic skills (reading, writing and arithmetic) and general education, The vocational teachers agreed less than academic teachers that vocational education should provide general education. This study suggests that the vocational education should go hand in hand with academic education and each should be mutually beneficial to each other. Therefore, the vocational education program will have graduates which are more all-round and be able to adapt in constantly changing technological work environment.

Teachers in this study supported that vocational education should provide job placement for students after graduation. There should also be more involvement of employers in the planning of school curriculum. Work experience should be part of vocational education program as to expose the students to world of work.

References

Hemp, P. E.(1980). Building Case for the Core Curriculum in Agriculture. Journal of the American Association of Teacher Educators in Agriculture 20(3), 2-4 &66.

Lela, A.T (1982). Background Characteristics and Perception of Vocational, Need of Students in a Vocational Agricultural Schools: Peninsular Malaysia. Unpublished Doctoral Dissertation, University of Pittsburgh, 1982.

McCracken, J.D. (1986). Employer Perceptions of Role of schools in Preparing Youth for Productive Work. A Report of Research, Fakulti Pengajian Pendidikan, University Pertanian, Serdang, Selangor.

Nelson, C. L. (1985). Program For Century 21: The Bio-Electronic FutureThe Agricultural Education Magazine. 58(6), 8-9.

THE PROCESS OF CHANGING THE ADMINISTRATIVE CULTURE

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The literature is specific as to the impact of the leadership role of campus and district administration on teacher/student morale and performance. The focus of this position paper is on the role of the principal as instructional leader. The theory advocated being that effective teachers, master teachers, desiring to become principals can, through research, simulation, refection, and facilitation stimulate a culture of change through an enhanced knowledge base. This culture will result in a permeation of the traditional administrative system, and thereby increase the likelihood of fundamental and systemic change from within the system.

Smith and Andrews (1989) in Instructional Leadership: How Principals Make A Difference state, When taken collectively, the 'effective schools' studies reflect the view that the direct responsibility for improving instruction and learning rest in the hands of the school principal. p. 1 Additionally, Smith and Andrews document that the perception of the teachers of the principal as the instructional leader is essential to the achievement of students, especially, low performing at-risk students.

Bennis (1984) in his research focusing upon leadership, identified four competencies of leaders:

- management of meaning,
- of attention,
- of trust,
- and self management.

Rutherford (1985), identified effective principals "(1) have clear, informed vision of what they want their schools to become-visions that focus on students and their needs; (2) translate these visions into goals for their schools and expectation for their teachers, students, and administrators; (3) continuously monitor progress; and (4) intervene in a supportive or corrective manner when necessary." p. 32.

Just as schools and the populations of students served by schools have changed, so also has the role of the school administrator, e.g., the campus principal. No longer can he/she be the benevolent dictator, the all knowing father, or the silent evaluator. To meet the requirements of the schools as they exist, principals must have the skills of an instructional leader and facilitator of change. They must respond to the on-going change in needs of a variety of populations and constituents. Those who do the job well love the work they have to do. They make a difference; they know instruction; they understand curriculum; they welcome change and maintain a safe, orderly, disciplined environment. They have a vision for themselves and for their schools. The job of principal is no longer a job, it is a vocation - a calling they love because these principals make a difference in the lives of the people they serve. They collaborate with others. Barth (1990), Bennis (1985), Smith and Andrews (1989), and Glickman (1990) all acknowledge that the leaders of effective schools, schools where children are learning, encourage inquiry and change.

Texas

Change in administrative structure of Texas schools have been difficult make. If an administrator did not buy into the Effective Schools" concepts when widely introduced in the late 1 970's, he/she missed the first piece of the puzzle. If that administrator was not strong instructionally, the disadvantage was doubled. The utilization of Madeline Hunter's "Effective Teaching Practices has made a difference in some classrooms and the opportunity for instructional improvement was present.

The concept of Master Teacher Duties, Induction, and Mentoring has evolved with or through the reform movement. Each of these, though not mandated, remain critical elements in the school improvement initiative. Finally the evolution of site-based, shared decision making (Glickman, 1990) left additional administrators behind. The concept of the site-based decision making is the empowerment of teachers, those closest to the students, having an effect upon practices and decisions at the campus level. This philosophy is virtually akin to shared decision making, being if I as the teacher am empowered as a stakeholder, I will also be more responsible for the performance outcome The concept is valid for if I consider myself to be within the Circle of concern" of the administrator then I have a vested interest in the program. Glasser might say, "are you friends? This means can you talk, do you communicate, is the system open? There is a difference between friends and buddies, friends maintain a professional relationship. If we are friends and you are my principal, then I am also a stakeholder.

For those administrators that missed one link in the process of school improvement, the Gestalt of the initiative is lacking. Without the understanding that comes from knowing, processing' reflecting, and metacognition, - the process of application is difficult. Therefore, the premise that an administrator must have intellectual, technical, and human relations skills (Glickman, 1990) to be competent is correct.

Change

If accepted as the premise, how is change affected? Change must come from within and must be voluntary or sought after. The state of Texas has been correct in many of the mandates as research is clear that when a change in behavior is forced, if effective, the belief will follow. The key is if effective - there-in lies the role of outside facilitation. In the League of Professional Schools, Georgia's Program for School Improvement to sustain school renewal in shared governance, school-wide instruction innovations, and school-based action research, empowerment and site-based decision making has been used to promote change. (Glickman, 1992). During this process he identified the Complexities of School Change. They include:

Complexity 1: Conflict will increase.

Groups that are involved in designing ingenious ways of solving problems can expect more conflict. As the process and roles of shared governance become more important to the members of the group, e. g., responsibility is assumed, conflict will result. The role of the facilitator is to manage and direct the understanding of the conflict

Complexity 2: Assessment information will cultivate critical dissatisfaction.

A comprehensive data analysis helps to cultivate a critical and sensitive look at teaching and learning in the school. The role of the facilitator is to encourage an examination and re-examination of basic assumptions.

Complexity 3: Without new information, decisions will be made that reinforce *the status quo.*

Restructuring schools without knowledge of innovative approaches is likely to result in the same structure as before. The role of the facilitator is to encourage an examination of the literature and visits to schools working on similar concerns. knowledgeable of various sources of information.

Complexity 4: With immediate school success, pressure for more short-term success will increase at the potential cost of long-term student gains.

When one is different the outside pressure is keen for return to the norm. The role of facilitator is to keep the group focused upon strategic plans for improvement priorities and issues. To address few goals of greater significance.

Complexity 5: Decisions about dreams will be easier to *make than decisions about how to attain one's* dreams.

Without outside intervention by the facilitator group members are likely to continue intellectual discourse and debate as a defense to making real changes. The role of facilitator is to move the members forward through change.

Complexity 6: Criticism will develop from the outside.

Empowered schools operate democratically and often find themselves criticized by other schools. The role of facilitator is to locate a rationale for the different types of criticism and to keep members from adopting a reactive stance.

Principals of Practice

Realizing that change never comes easily and that few good things come easily, a collaborative effort between Victoria Independent School District and the University of Houston-Victoria department of Educational Administration will begin a new administrative initiative. This initiative which is based upon the perspective research on leadership, staff development (building capacity), and change that the cohort of Principals of Practice will begin. The co-facilitators having both theoretical knowledge and practical application will collaborate. One facilitator being Associate Professor for School Administration, the other Associate Superintendent for Instruction. The cadre of Principals of Practice will be comprised of 30 self-selected master teachers (aspiring administrators) or current administrators. The district has a very fine program of staff development. Teachers are instructionally sound+. The knowledge base, to create a culture for change, will begin to be built in leadership through the development of a vision, the change process, communication, and adult development. Since culture is "the way we do business around here." (Bennis, 1985) it is hypothesized that the administrative culture will change.

References

Bath, R. Improving Schools From Within. San Franscisco: Josey Bass, 1990.

Bennis, W. The 4 Competencies of Leadership" Training and Development Journal. 38,8.

Glasser, W. The Quality Schools. New York: Harper Perennial: 1982.

Glickman, C., Supervision of Instruction: A Developmental Approach. Boston: Allyn and Bacon. 1990.

Glickman, C., Hayes, R., Hensley, F., Site-based Facilitation of Empowered Schools: Complexities and Issues for Staff Development." Journal of Staff Development. 13, 2.

Rutherford, W. School Principals as Effective Leaders." 67, 1. Phi Delta Kappan.

Smith, W., & Andrews, R., Instructional Leadership: How Principals Make A Difference. Alexandria, Virginia: A.S.C.D. 1989.

PARTNERSHIP BETWEEN UNIVERSITIES AND SCHOOLS AS AN INTRODUCTION TO SCHOOL REFORM

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INTRODUCTION

More than 10% of secondary school graduates are enrolled annually in Jordanian universities, as well as a large proportion of school principals, supervisors, and teachers in educational certification and training programs prepared by the universities for this purpose. Moreover, several university professors participate in cultural and scientific activities, and in conducting researches and studies which are applied mostly in schools. Most of the school teachers are also graduates of Jordanian universities.

However, the existing partnership between the universities and schools cannot be called an exact institutional cooperation and coordination, hence, its impact on school reform is limited. Both parties carry out this task because it is a requirement of their job, and the proof for that is that each party complains of the inefficiency of the other.

Universities complain of the low standard of secondary school graduates. On the other hand schools complain that universities don't meet their real needs. University graduate teachers don't master their teaching subjects nor methods of teaching them.

Teacher training and certification methods are not established on a correct comperhension of the nature of the subject and its teaching and evaluation methods. The educational administration programs provided by universities in school are weak, not unified, nor complementary, as they don't harmonize with the needs of school administrations.

The research issues which university professors and post- graduate students deal with don't contribute to the development of the education system or to solving school problems because they are not related to the needs of the field.

Absence of institutionalization in cooperation and coordination between universities and schools, and the obscurity of what each party wants from the other, don't contribute positvely and efficiently to the school reform process, and if they do , it is an unorganized and individual contribution. So it has become necessary to create mutual understanding and a common address between these two parties for the desired objective, especially because school reform has become the responsibility of all rather than a single institution. It is useful to analyze deeply and comprehensively the existing relationship between universities and schools prior to the suggestion of such a common language. That is why the present study endeavors to answer the following two questions:

1. What is the state of the current existing relationship between Jordanian universities and schools ?
2. What kind of partnership relationship is suggested between universities and schools?

Method and procedures :

To answer the above two questions the following procedures were followed :

Study sample : it consisted of 96 experts from the Ministry of Education and the Jordanian universities, distributed as follows :

* Ministry of Education	
- Assistant secretary - generals	1
- General directors	8
- Directors	18
- Heads of divisions	1
- Educational supervisors	3
- Secondary and basic school principals	16
- Secondary and basic school teachers	30
* Universities	
- Presidents of universities	1
- Deputy presidents	1
- Deans of faculties	3
- Deans of scientific research centres	2
- Heads of divisions	3
- Teaching staff members	5
- Heads of administrative and technical units (libraries, educational technologies, student affairs, activities.	4

In selecting the sample it was taken into consideration that it included specialists in all fields of the educational process and from various administrative and technical levels. The experts should have had work experience or higher administrative posts both at the universities and the MOE.

Study procedures

After defining the sample individuals, interviews were arranged with each member of the sample after showing willingness to answer the two main questions and any other related questions. A time schedule was set down by the researchers for the interviews and the two major questions, in addition to other questions which came up during the interview, were asked. There were 96 interviews of about 1 hour each (total 96 hours). In addition, some of the sample individuals provided the researchers with written reports, enriching the interviews. All discussions during the interviews were taken note of. After reviewing those notes and written reports,it was clear that the emphasis was on the following fields:

1. Educational policy and objectives.
2. Curricula and textbooks.
3. Certification and training of teachers.
4. Educational technologies.
5. Examinations.
6. Projects and school buildings.
7. Educational research and studies.

Study method

The content analysis method was used to analyze the answers, reports, and discussions. The "idea" was adopted as a basic unit of analysis, whereby ideas repeated by the sample individuals were considered.

* Study Results

The results of the answers to the two major questions in each field were as follows:

1. Educational policy and objectives

A joint committee from the MOE, universities, and other parties was formed to set down basic concepts of educational policy in Jordan to be discussed by specialized councils whereby this committee prepared its educational policy, objectives and content before the holding of the Conference for Educational Development by the MOE in 1987. Experts from the universities participated in the conference by evaluating the present situation of education and diagnosing its problems, comprehensively, including all educational cycles. Several university professors in the central work team contributed to setting down a comprehensive plan for a methodology of development and supervision of its implementation, and in defining the roles of participants in the plan, in order to achieve partnership. In addition, several university professors participated in preparing working papers, and discussing, writing and approving recommendations.

2. Curricula and textbooks :

Several university professors took part in national teams supervising the setting down of curricula outlines. In addition some specialists at the universities wrote school textbooks for the basic and secondary cycles, and the university libraries were provided with copies of them.

However these participations were on a personal and not an institutional basis, whereby individuals responsible for school curricula and textbooks contacted university professors, taking into consideration the required specializations, on the basis of personal conviction.

To activate cooperation between Jordanian universities and the MOE and to ensure its continuity up to the desired level, the sample individuals suggested the following:

- To include deans of education faculties at the Jordanian universities in the Council of Education whose main responsibility is approving curricula and textbooks.
- To have institutional communication between the Jordanian universities and the MOE to form specialized committees for each study subject, with the membership of specialists from the universities, MOE, and other parties in order to develop the outlines of curricula, and write textbooks. These committees also supervise the evaluation of textbooks, whereby special teams are asked to prepare evaluation studies in order to have continuous evaluation of various forms, such as discussion in seminars held for the teachers enrolled in the educational certification program at the universities. It is also

advisable to have open channels between the teachers and supervisors and the committees which supervise textbook writing. Such a mechanism enriches the process of setting down developing and evaluating curricula and textbooks, which, in turn, have a positive impact on the process of school reform and the improvement of school outputs.

3. Preparation, certification and training of teachers :

There is a distinctive institutional cooperation in this field according to organized and planned procedures. There is also constant coordination and revision, between the universities and MOE especially quantitatively, and sometimes qualitatively exemplified in the faculties of Educational Sciences responding to the needs of the MOE.

It was crystallized in teacher preparation by introducing two specializations: (1) class teacher and (2) field teacher.

The most distinctive fields of cooperation in certification are :

certification of basic cycle teachers from community college diploma level to the B.A. level, certification of secondary cycle teachers and principals from the B.A. level to the higher diploma level, and certification of educational leaders and supervisors to the M.A. level. The MOE is also aided by experts from universities to train school principals and teachers in several developmental and innovative fields, and some university professors take part in committees specialized in educational training programs which are implemented by the MOE (such as educational counselling, special education, and education for the gifted). The universities, in turn , are aided by educational supervisors who supervise the students in the practical education program. The faculties of educational sciences at the universities will undertake the responsibility of certifying all holders of community college diploma to the B.A. level within a time schedule set down for this purpose, agreed upon by the MOE and the universities.

The MOE is a member in the councils of faculties of educational sciences in the Jordanian universities, whose major task is approving the study plans of various educational specializations.

While discussing activation of cooperation between education faculties and the MOE, some debatable issues were highlighted: the MOE sees that universities should cover its need of certified teachers while the universities don't list it in their priorities. There is agreement, however on gradual reconsideration of the study plan of certification of teachers, principals, and supervisors (B.A., Diploma, M.A.) within the university capabilities.

In order to enhance cooperation the sample individuals suggested the following:

- Expanding in educational specializations at the university faculties of education to meet the MOE needs.
- Having MOE experts participate in teacher certification programs at the universities to ensure the practical dimension which gives the opportunity for constant revision and evaluation of these programs.
- Having university professors participate, according to their academic interests, in the specialized committees at the MOE in planning, implementing and following up in-service teacher training programs, according to their academic interests.

- Having the MOE take an effective role in supervising field training of those enrolled in teacher certification programs at the universites.
- Partnership between the universities and the MOE has a role in developing teacher performance inside the classroom, in acquiring skills for dealing with students' problems, and in utilizing the school and local environment for improving student achievement. The actual participation of universities in teacher training programs is a strong support for the MOE, as the participant teachers are motivated in the way of promotion and allowances.

4. Educational Technologies

Cooperation in this field is weak and limited. It includes some training courses for those who work in learning resource centres of the MOE by those concerned at the universities. The universities are also represented in the consultative committees of these centres, and they welcome students from some schools to show educational films and their production.

To consolidate and expand cooperation, the universities could contribute to setting down and implementing the plan for training teachers to use and produce some educational technologies within existing school capacities, and establishing joint centres for producing educational aids, technologies, and textbooks, as well as carrying out repair and maintenance work, which reduces the cost. Joint studies and research could also be carried out to know students' opinions on educational television and how to develop it.

Rapid technological development and increase in prices necessitate the establishment of such cooperation and coordination, which reduces expenditure on this crucial area.

5. Examinations:

Cooperation in this field is recent. It began with the formation of a council for the general examinations at the MOE to set down the general policy, approve the general framework of exam specifications and annual plan and to approve exam paper specifications, whereby six experts from the universities are represented in this council, two of them being university presidents.

This council could be activated through the evolvement of several specialized committees to set down detailed plans and programs for these policies and to follow up their implementation. University professors who have experience in writing textbooks or are interested academically could be Represented.

Such specialized committees and their activities facilitate the designing of standardized achievement tests and developing curricula and textbooks through feedback. They also help supervisors of teacher certification and training programs to reconsider these programs.

6. Projects and school buildings :

Cooperation in this area is limited because engineering projects put forth by the MOE for implementation face strong competition from the private sector. Heads of divisions of architecture at the universities sometimes participate in committees for designing MOE schools and evaluating MOE projects. Some students of engineering are trained at the MOE in the educational projects which are supervised by it.

In order to activate cooperation it was suggested :

(1) To conduct joint low-cost engineering studies (2) To hold specialized training courses at the universities for the engineers working at the MOE. In addition, exchange of information and newsletters and formation of joint committees for setting down school designs suitable to Jordanian society was suggested.

7. **Educational research and studies :**

There is some joint work in this area but it is not within institutional framework. Some staff members at the Faculties of Education are asked to conduct studies within the MOE priorities. The Committee of Educational Research, which sets down the general policy for research and approves research projects, has permanent member from the faculties of education and the Scientific Research Deanships. Teaching staff members also participate in seminars held by the MOE. The newsletter published by MOE on educational research, highlights the activities of the universities in this field, and there is participation from the faculties of education in editing and evaluating the contents of Risalat Al-Mualim, besides exchange of publications.

In spite of the various forms of cooperation , there is affirmation from both parties for constant development. To achieve that, the MOE could define its research priority issues in the field and generalize them on the university professors and post-graduate students to direct their interests towards these issues. The MOE could propose the mechanism for implementation in order to respond effectively to the education system problems.

The universities and the MOE could conduct joint studies, publish the studies conducted by the MOE in the publications issued by the Deanship of Scientific Research, set down a clear and defined mechanism for utilizing the results of the studies, expand membership in research committees, and hold specialized training courses.

From a future prospective for activiation of cooperation the MOE could benefit from the sabbatical leave of university professors to work at the MOE.

It is noticed that cooperation is limited only quantitatively, yet activiation first of all needs that the MOE defines the research issues according to its priorities to attract the attention of researchers.

CONCLUSIONS

After reviewing the study results the following conclusions could be drawn :

- There is cooperation between the universities and the MOE in most areas of the educational process, and it is directly reflected in the schools, yet it is not an institutional cooperation and is not permanent.

- Officials at the MOE and universities believe strongly that partnership is very important in order to introduce school reform, especially because each party is directly affected by the other.

- Ensuring a strong, permanent partnership needs instititutional planning, implementation, and evaluation, whereby all school activities are covered.

- If the universities provide the MOE with training courses and the teacher certification programs needed, it is easier for them to adapt their programs and activities in the light of their capabilities.

- The best form of partnership suggested was that both parties should be represented in joint specialized councils and committees.

- Partnership economizes educational expenditure and efforts for school reform without affecting the quality and standard of education.

RECOMMENDATIONS

The following recommendations could be made in the light of the previous results and conclusions:

1. Forming a higher council, from the MOE and universities, to set down a general policy for partnership, and to approve plans and programs evolving from this policy.

2. Forming specialized joint committees to set down plans which cover all areas of the educational process, and are directed towards realizing school reform.

3. Setting down proper legislations which ensure the continuity of the work of those specialized committees effectively, which facilitates the harmonization of the MOE regulations with those of the universities.

References

Act of Education : Act of Education No. (3) for the year 1994. Official Gazette. issue No. 3958 (page 608) 2/4/1994.

Act of Jordanaian Universities : Act No. (29) for the year 1987. Official Gazette. issue No. 3499 (page 1695) 16/9/1987.

Ministry of Education : First National Conference for Educational Development. Risalat Al-Mualim, Vol. 29 issue No. 3,4 - August 1988.

Ministry of Education : Seminar on Educational Policies in Jordan. Amman, 1992.

PARTNERSHIP FOR EDUCATION STAFF DEVELOPMENT: JOINT TRAINING PROGRAM AT THE AMERICAN UNIVERSITY IN CAIRO

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In a joint effort funded under the auspices of the United Nations Development Program (UNDP) and aimed at enhancing Egyptian education, in December 1994 the Egyptian Ministry of Education (MOE) and The American University in Cairo (AUC) undertook a collaborative training program for Ministry middle-management personnel. Specifically, this program was designed "to satisfy Egypt's need to function in the global world economy and deal with international development agencies.

During the course of the contractual period, from December 25, 1993, through August 15, 1996, the agency OUDA (Operational Unit for Development Assistance) transferred funds in excess of $100,000 to the university on behalf of the Ministry of Education. In return, the university agreed to set up a certificate program which consisted of six modules: General English, English for Special Purposes, International Trends in Educational System, Introduction to Computer Applications in Education, Managerial and International Communications Skills, and a Final Project. These modules were to be implemented by the university's Center for Continuing and Adult Education (CACE). The program was to be repeated for three consecutive groups, with each session scheduled for a six-week period. The language of instruction was to be English. The obligation of the MOE was to identify, for each session, a minimum of 20 participants from its ranks using selection criteria which were to be set jointly by the Ministry and AUC.

The criteria finally agreed upon, with some modifications after experience with the first group, included, first, that candidates demonstrate a sufficiently high level of English proficiency by achieving a score of at least 60% on AUC's standard English proficiency test (EPET), and subsequently by passing an interview in English during which the candidate "should strongly convey. an interest In attending the program; and second, that candidates should have worked for the Ministry for a minimum of 15 years and attained a middle management position, or be at the rank of senior teacher who is strongly motivated to be promoted within the administrative hierarchy Two additional conditions imposed as a direct result of problems with the first group were that the candidates be fully aware of the Ministry's goals for the program and that they refrain from engaging in outside pursuits, such as giving private lessons, while enrolled in the program. The target age group was 40-50.

Instructors for the program included CACE staff as well as regular and adjunct faculty from the academic area of AUC. The course in "Trends in International Education Systems." with which this paper is primarily concerned, was jointly conducted, in English, by two American- trained Education specialists, Dr Sabiha Aydelott and the author of this paper.

Uppermost in the planning of the International Trends module was the assumption that this program was to focus on training middle management MOE employees to develop a more global awareness and approach with respect to education in Egypt. American (U.S.), European (Germany, Hungary, Denmark), Asian (Japan) and Egyptian systems would be used as case studies to exemplify different types of school systems in the world and to promote awareness of international trends and issues in both developed and developing nations, focusing primarily on the roles of students, teachers, school administration, school governance practices and social and cultural influences. Issues such as teacher education, school finance, leadership styles, special education, educational technology, and teaching methods would be analyzed to highlight the reasons behind successful and unsuccessful reform efforts.

The post-graduate level course of study envisioned in these plans implied certain expectations regarding student preparation and capabilities. The success of such an ambitious course would inherently be a function of a balance between teacher expectation, course content, and quality of students.

The initial proposal for Trends in international Education Systems was written by an American trained Egyptian faculty member and approved by the Ministry. This proposal basically set the agenda for the pilot year. The two American instructors worked the proposal items Into the original syllabus, with the assumption that the participants-graduates of Egyptian universities-would be prepared to do work essentially comparable to that expected of graduates of an American institution. A key factor here would be the Ministry's ability to deliver candidates who met the criteria agreed upon.

As it turned out, the discrepancies between the expectations and the final outcomes of the selection process were major determinants of what happened in the three successive sessions of this module. The following provides brief profiles of each of the three groups and identifies some of the ensuing problems caused by the mismatch between program goals and target populations, as well as the adjustments they required.

Group 1: January 17 - December 20, 1994.

In the selection of the 19 participants of this initial group the established criteria appear to have been rather loosely interpreted, save for the English proficiency requirement. Even though these candidates seemed to have been selected only or primarily on the basis of their English language ability and because most of them had recently participated in a training course in the United Kingdom, there was a thirty-two point spread in the language scores, which ranged from 64% to 96%. All members of this group, with one exception, were teachers, not middle-management people. Most were age 30 to 40 and had been with the Ministry 10+ years.

The fact that this class consisted primarily of teachers explained, in retrospect, much of the considerable resistance they showed initially to homework assignments and library work-and in fact, to the course itself. The instructors had been led to expect a group of highly motivated middle management employees enthusiastically thirsting for knowledge of global education. We found instead a group of reluctant teachers, sullenly resentful of having been taken from their classes and every-day routines. They complained of feeling stressed because of their "heavy course load"-with this third course (International Trends) added, on short notice (a further inconvenience), to two concurrent courses they already carried. But since the teachers were given full release time from their teaching responsibilities in the schools to participate in this program, the three-course load did not seem overwhelming. There had to be-and was, in fact-another explanation for the participants' initial resistance to the course, to the ambitious syllabus, to the out-of class assignments-an explanation that gradually surfaced later on as the session progressed. At first, from time to time someone would complain that the work they were given was interfering with their jobs. It was finally revealed that although they had been given zero teaching loads, the schedule for the International Trends class conflicted with the time when they were engaged in private tutoring, a tradition in the

Egyptian educational system which allows teachers to substantially augment their salaries by giving private lessons prior to the Thanaweya Amma, the government exit exam given at the end of the last year of high school. With an average reported salary of LE 150 ($40) a month, many teachers, including those In our class, claimed to be compelled to do private tutoring to supplement their income.

Another cause for discontent in this first cycle that slowly came to light was the fact that the participants professed to have no idea why they were attending a program at the American University. They claimed they had not been advised by the Ministry of the goals and potential rewards of such a program. As soon as this oversight was discovered, a representative of the Ministry was called in to explain the program's goals to the participants in detail, including the prospects for promotion. But by this time, two months into the program, many expressed a lack of interest in, and even their disdain at, the idea of promotion. Again, among other reasons for this attitude was the hovering presence of tutoring. Promotion would exclude them from this sometimes very lucrative practice.

And finally, as expected, Group 1 was adversely affected by the considerable range of language proficiency. About halt a dozen of the students seemed to understand very little of what went on in class and even more were unable to read and comprehend end the somewhat advanced, technical language of the assigned readings. Faced with the difficulties with comprehension in class, the instructors made adjustments by simplifying speech patterns, slowing down the delivery, frequently repeating, and introducing a Socratic approach to the information in the readings.

After the tensions of the first class, the relationship between students and instructors became one of coraderie and a diligent and eager exchange of information and ideas, as we undertook to subtly began to alter the contents of the syllabus to fit the aptitudes of the students. We shortened selected readings, reduced the number of written reaction papers, and gave the class some release time for library projects to be carried out at the AUC library-an important opportunity, continued also for the subsequent two groups, since as teachers the students had no library facilities at their disposal. After 'a brief orientation, use of the library quickly became one of the highlights of the program.

The fact remained, though, that the students, regardless of the issue of motivation, appeared exhausted after the many hours in class in addition to the homework assignments, on top of their other commitments. Both the course content and the dialog in class suffered because the students felt overloaded.

Despite all the problems, however, the experience with the pilot group yielded several positive outcomes. Notably, the inclusion of guest speakers in the proceedings proved to be an unexpected catalyst In spite of the instructors' apprehension of how the speakers would be received given the unforeseen attitudes and language discrepancies in this group, we were surprised and gratified at the enthusiastic response. The class asked intelligent, pertinent questions and enjoyed their conversations with the speakers during break time. Further, the topic of one of the guest lectures-the varieties of teaching methodology found world-wide-was the impetus for the successful conclusion of several of the final student projects, and indeed for the positive closure to the students' course work.

By focusing more on methodology we at last found a stabilizing tail for our wig-wagging kite in this course. Tying onto the methodological ploy, we began to use course content to demonstrate those methods which interested the class most: debate, panel discussions, group research, class presentations, and cooperative learning. At the time of the final presentations this class presented some thoughtful, useful projects.

Group 2: January 15 ~ July 20, 1995.

In contrast to the procedures used in creating Group 1, in identifying the participants for this second cycle of the program the Ministry enforced the official selection criteria more rigorously. The average profile of the second group was that of an older individual (age 40-50) with administrative or supervisory responsibilities (14 of the 19 participants) who stood to benefit from the program in terms of possible advancement within the ranks of the Ministry. Participants of this group were highly motivated and were more focused on their studies.

The problem, once again, was English language proficiency. This group of students were initially tested using the university's EPET English skills test as well as an associated writing skills test. The results indicated a wide disparity in English language ability-an overall thirty-eight point spread in scores (48% -86%). A further breakdown of the scores showed that 9 candidates scored in the 58%-86% range while over one half of the candidates fell in the 48% - 56% range, well below the minimum 60% required for acceptance into the program. A suggestion by the instructors of the English modules that the class be divided into two sections along the lines of language ability was rejected by the Ministry, so the program proceeded as prescribed.

Our experience with this group highlighted the difficult relationship between language proficiency and course content. Teachers in the English language module of the program lauded the cycle 2 participants for their enthusiasm and indicated satisfaction that their course succeeded in reducing the disparities in language ability within the group. However, our experience was quite different: when it came to the concepts and the level of written and spoken discourse of the international Trends class, the progress made in the English classes clearly fell short of functional adequacy. It was simply not enough.

Thus further adjustments were in order. Given the problems experienced with the pilot group with regard to the selected readings, we intended to switch to a text which used simpler language and presented comparisons among selected international systems in five major dimensions: student, teacher, principal, educational governance, and the impact of social and cultural influences on education, eliminating or minimizing historical and political considerations (Richard P. McAdams, Lessons from Abroad; How Other Countries Educate Their Children). However, in an infrastructural glitch, in the end copies could not be obtained and distributed as previously agreed. With that expectation not fulfilled, we reverted back to selected readings, lectures with charts on the blackboard, albeit in simpler language, and discussions in class. While some of the same strategies that proved effective with the first group continued to be used, as the program wore on more and more items on the original syllabus had to be dropped. Written work became minimum, number of guest speakers dropped from five to one, discussions of readings took longer and became more redundant. The participants remained enthusiastic and appeared to enjoy the class discussions, but the level of the information being disbursed was alarmingly less and less, although the students did not seem to be aware of this change. They were quite happy to debate how teacher training in Egypt might be improved and made comparable to other systems, resulting in higher teachers' salaries, or to shake their heads at the social problems of other state systems who insist on a separation of church and state.

With the need for these downward adjustments in expectations as to the scope and volume of material to be covered in the International Trends class, it was curious to find at staff meetings that all other project faculty seemed up-beat and impressed by the improvements shown by this group. They favored this group over the pilot group, who had admittedly been contentious but who, in my estimation, had grown and had stretched themselves in the course of the program and who, in the end, had produced some very fine final projects (something that the current group was not capable of doing). Obviously there was a factor missing, which turned out to be one of language replacement. Questioned point blank, the instructor of every other module (other than that of the English language practicum) admitted, in some cases reluctantly, that English as the mode of instruction had been all but abandoned. By now, the other instructors were teaching (or "explaining") the fine points in Arabic. Although clearly at variance with the original guidelines for the program, this seemed a more realistic approach, given the students' difficulties with English. On the other hand, it was clearly not an option for the International Trends course since neither instructor spoke Arabic.

Having abandoned the idea of covering the course content set in the syllabus, students and instructors in International Trends continued with lively discussions in the classroom, occasionally struggling through more complicated English readings. This group tended to toe the "party line." fiercely defending the Egyptian system while at the same time acknowledging the need for change. Unlike the first group, many of these students always spoke of improving the system in optimistic tones. The one time when their optimism flagged was after a field experience to visit the Cairo American College, a private K-12 facility which we felt would provide them with an example of excellence in American-style education. Unfortunately, instead of being encouraged, they found the contrast between this school and most Egyptian government schools (as well as many schools in the United States, as we pointed out) so great that many of them came away from the experience in a very sober mood.

The liveliest discussion which occurred during this session served to point out a curious dichotomy in the group that was sparked by the reading of a children's book called "The Day of Ahmed's Secret.." It is a charming book (or so I thought) about a young boy who drives a donkey cart delivering buta gas to help his family. With beautiful illustrations the book follows Ahmed through a typical day in Cairo. On this last day of class, I had decided to do something "fun" I turned the students into a second grade class (8 year olds) and read to them. Then I asked for reactions to the book. The "discussion" turned into a shouting match between those who vehemently opposed Egypt as anything other than a progressive industrial society and others who were willing to acknowledge the realities of an overpopulated society that educators must work toward changing. Though the outcome of this exercise was totally unplanned and unexpected it seemed to underscore the need for and value of broader perspectives provided by a program such as this collaboration between AUC and the Ministry. After the smoke had cleared, we all parted friends, and I left the class with an optimism which had seriously eroded during the teaching of the course.

At the conclusion of this second year of the program, my major recommendation was to abandon entirely the pretence of English language instruction and for the CACE administrators of the program to hire an Egyptian faculty member to teach the course in International Trends. To this end, I (and subsequently Dr. Aydelott) resigned from the program. While meeting and working with Egyptian colleagues in the education field was a most enjoyable and rewarding experience, I was not prepared to once again face the frustrations of teaching a content course to a class whose English language abilities were limited at best.

During the tall term of 1995 several meetings between representatives of the American University in Cairo and the Ministry of Education resulted in a redistribution of the 45 hours required for the International Trends in Educational Systems module. In this new configuration ten hours were 10 be devoted to teaching methods in accordance with a request from participants from both Group 1 and Group 2. Another eight hours of instruction were to cover subjects such as educational technology, assessment and accountability, curriculum integration, and learning styles. The remaining 27 hours would still deal with international education.

Five faculty members were identified who were willing to teach the branch areas of this module, and Dr. Aydelott and I were asked to continue with the International Trends segment, which we finally agreed to do. However, instead of the team teaching approach we had used with the other two groups, with both of us present for the majority of classes for purposes of continuity-because of time constraints we split the material between us and presented it in separate segments.

It is noteworthy that the stated purpose of the program had also undergone a subtle change. The rationale now read, "The program was designed to upgrade the management capabilities of the Ministry of Education by providing a nucleus of Ministry administrators with the basic skills needed to absorb the anticipated inputs of management information, in-service teacher training, facility expansion and policy studies to produce effective program in order to keep pace with population growth in Egypt." The new rationale clearly represented a swing from international competitiveness to more internal concerns of Egyptian education.

Group 3: February 26 - April 17, 1996.

The profile of this group was very similar to Group 2 with respect to age (40 - 50 year old), years of service, and wide range of English language proficiency, with a thirty-two point spread in scores (56% - 88%) on the English proficiency test. Once again, however, we missed our professional target profile since the majority of these selectees were teachers or support staff such as librarians rather than middle management personnel

This class was judged by some other instructors In the program to be of low English proficiency but high motivation. But there was little evidence of motivation in my sections of the program. Students were often late to class, sometimes by 30 to 60 minutes, citing a range of excuses or explanations, including having been to prayer. They would interrupt lectures or discussions with irrelevant questions or comments or, as one memorable student, doze most of the time but occasionally rouse himself long enough to expound irrelevantly on a favorite theory or observation, only to doze off again. The students often wanted to start class late and be released early, by half an hour or an hour. They were tired, they said-a complaint I was certain was true since, once again, they had a full morning scheduled in the computer lab before this class. In short, of the three groups this one showed the least motivation and self discipline. It almost seemed the Ministry had run out of deserving candidates.

Like the other two groups, Group 3 was interested in methods of teaching and valued) any useful materials shared with them. Most out-of-class as well as in-class discussions had to do with this subject and with sources where they might obtain various types of teaching materials. My role had become that of a resource person for them, in a subject of interest to them but one different from the intended focus of the course.

The evaluation of this three-cycle program took two forms. Feedback was solicited from the participants after each session and the results shared with the instructors for diagnostic purposes A more comprehensive assessment was attempted after the program was concluded so that somewhat longer-term effects and perspectives can be gauged. To the latter end, participants from all three groups of the MOE/AUC certificate initiative were invited by the program coordinators to take part in a general follow-up meeting for all program graduates on the AUC campus in the evening of November 21, 1996.

The response from Groups 2 and 3 was excellent, with 14 of 19 graduates from Group 2 and 16 of 20 students from Group 3 attending. Group I was the least responsive, with only 6 of the 18 people who finished the program present--possibly because too much time had passed since their role in the program, because of too little outcome from the program, or because contacts with some of them could not be established.

During this meeting all attendees were asked to (anonymously) fill out an Informal questionnaire designed to assess the efficacy and long-term effects of the program as a whole. This method of evaluation was chosen because of the consensus among the Staff that in the Cairo environment mailed questionnaires would either never reach the participants or never be returned, nor would telephone surveys yield candid responses. In addition, as it turned out, several of the respondents needed help in translating the questions into Arabic, and some in fact responded in Arabic. Such help was readily available at the meeting-which was viewed and warmly welcomed by all as a "reunion" Based on an analysis of the returned questionnaires, retrospective reactions to the program seem to have sorted out into two major divisions. While 89% of the participants judged the program "highly valuable" to themselves as professional people, and 94% indicated they would recommend such a program to a colleague, 78% experienced no change ("promotions") in their Jobs and expected none. During informal discussions when individual participants had the opportunity to voice their opinions at more length, many speculated that the Ministry had no vision or plans from the outset to utilize their newly trained personnel in ways which would benefit both the Ministry and the trainees themselves.

Although this paper has dealt with the program primarily from the point of view of the international Trends module, the general conclusions are reflective of the experiences of all six modules. Language of instruction-the uneven and generally inadequate levels of English proficiency was perhaps the impediment most responsible for the gradual erosion of the program in terms of the language and stated goals of the original proposal. In the International Trends module it was manifested by a general lessening of the amount and quality of information disbursed as well as in the requirements of written work, especially in Groups 2 and 3 In other modules English as the language of instruction was dropped by virtually everyone and Arabic was used in the classes whenever possible. The English language classes became more rudimentary as the need to narrow the gap in English language competency became more evident with succeeding classes.

Lack of adequate communication between the Ministry and members of the participant groups contributed to student attitude problems which affected all modules. This was especially true in the pilot group although it somewhat improved in the 2nd and 3rd groups.

Organizational weaknesses also took their toll. For example, failure to schedule the modules to avoid overlap in computer lab time as well as other overlapping out-of-class assignments tended to further debilitate the energies of the participants, adversely affecting the quality of work and general attitudes toward the classes.

On balance, the MOE/AUC program, and especially the International Trends module, was an at times frustrating and yet in the end rewarding experience for participants and instructors alike. The frustrations came for the most part from the inconsistencies between the program's original visions, goals, guidelines and requirements on the one hand, and the selectees' linguistic preparedness and flen-motivation n he ther. he goals, whether in their original or revised form, were commendable, but they had not been matched by an assessment of participant needs as the basis for their selection or a clear vision of intended outcomes or of prospects for utilizing the results. Viewed as a pilot program, an experiment that tolerated trial and error and invited adjustments, and one that taught lessons, this undertaking clearly delivered. Apart from its organizational and academic weaknesses, the experience also, without doubt, left its mark on the participants. A program such as this cannot by itself bring about change. What it can and did accomplish was opening up a new vista for the participants, a window through which what is close to home can be seen and judged more objectively. Nothing is better proof that this window was not blind than the virtually unanimous hope expressed by those at the reunion that more like this experience for them is yet to come.

FOSTERING PARTNERSHIPS BETWEEN THE HONG KONG INSTITUTE OF EDUCATION AND PRIMARY SCHOOLS IN HONG KONG - A STUDY OF THE COOPERATING TEACHER SCHEME IN THE PRACTICUM OF THE NEW COURSE

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INTRODUCTION

Background of The Hong Kong Institute of Education

The establishment of the Hong Kong Institute of Education (HKIEd) in September 1994 signified a step forward in the development of teacher education in Hong Kong. By merging the previous colleges of education. the Institute has become an autonomous publicly-funded institution divorced from the direct management of the Education Department (the education authority of Hong Kong). The change of status has allowed the Institute more flexibility in managing resources in professionally desirable ways and developing academic quality. Being the sole provider of certificated teachers for primary schools and junior forms of secondary schools the HKIEd has the mission to develop into a centre of excellence for the education of teachers in Hong Kong.

The Practicum Curriculum In the New Course

To improve the quality of education for pre-service teachers, a practicum curriculum has been introduced to the Certificate in Primary Education (CE Primary) Course to replace the traditional Teaching Practice. The new design incorporates four main themes:

1. the cognitive approach of reflective practice (Schon. 1987) is adopted in place of the traditional skill-based based training
2. integration of theory and practice (McIntyre & Hagger. 1992) is considered more conducive to the development of professional competence than merely putting theory into practice
3. collaboration is emphasized in addition to cooperation
4. the development of pedagogical content knowledge (Shulman. 1987) as opposed to simply acquiring teaching skills

In practice, the practicum curriculum is composed of a campus-based element and a school-based element. The campus-based Practicum Seminar offers student teachers (STs) chances to critically examine practices in action and evaluate the effectiveness of teaching. It is a forum where STs learn to reflect through observing experts engage in educational discourse and develop reflectivity by actively participating in the discourse. Different modes of School Experience are structured to provide STs with progressive learning experience throughout the two years of the course. Starting from School Attachment to Cooperating Teacher Scheme (CTS) and finally to Block Teaching Practice, STs learn through observing others teach. through teaching in collaboration with cooperating teachers (CTs) and through teaching independently. They gradually build up confidence and acquire professional competence that is required for coping with complex classroom situations. STs are encouraged to reflect in and on their action (Schon, 1987) to develop their personal theory. The alternating of Practicum Seminars and School Experience in the course enables STs to integrate theory and practice and develop pedagogical content knowledge.

Partnership Between the HKIEd and Primary Schools In Hong Kong

In the past, when Colleges of Education placed STs in primary schools for their Teaching Practice, schools assumed the responsibility of providing places for STs to practice theories they had learned. College lecturers were expected to supervise STs' teaching - to advise and assess STs. It was taken for granted that the STs could teach independently without much assistance from school teachers. In order to safeguard pupils' interest, STs were only requested to comply with school regulations and adhere to the scheme of work. To monitor STs! behaviour in school. heads were invited to complete a report at the end of the Teaching Practice. For the purpose of reporting, some school heads and regular teachers would observe STs' teaching.

With minimal support from schools. some STs experienced endless frustration in having to cope with the day-to-day teaching. They resolved to seeking immediate solutions to classroom problems without considering the long term effects. Faced with the cruel reality of the classroom, they found the aims and principles advocated by College tutors irrelevant. This feeling of conflict between theory and practice persisted and affected their professional development. Maynard & Furlong (1993) pointed out that trainee teachers often went through a number of distinct stages of development. namely. Early idealism. survival. recognizing difficulties hitting the plateau and moving on. Anderson et al. (1995) suggested that the "sink or swim" approach adopted in the past could at best contribute to the acquisition of survival skills.

Literature (Alexander, 1990: Maynard & Furlong, 1993: Furlong et al.. 1988; Wilkin, 1992) suggested that STs need different forms of knowledge for professional development. Institute tutors (ITs) possess theoretical knowledge and regular teachers possess practical knowledge, together they should work collaboratively to help STs integrate theory and practice.

A partnership which enhances collaboration between the Institute and schools is crucial for helping STs reflect on their teaching and move on after they have familiarized themselves with routine teaching tasks. The introduction of the Cooperating Teacher Scheme (CTS) to the initial education of primary school teachers is the first attempt to establish such a partnership in Hong Kong. A triadic relationship is to be created among the Institute tutors (ITs), the cooperating teachers (CTs) and the student teachers (STs). It must be emphasized that, basic to our belief. the paramount concern of all three parties is the pupils at school who will be the ultimate beneficiary of the innovation.

The Cooperating Teacher Scheme (CTS)

The Cooperating Teacher Scheme was first introduced in the academic year 1994-95. It completed its second year of operation in 1996. As a key element of the School Experience programme. it provides first-year STs of the two-year full-time CE Primary Course with structured experiences of learning to teach and opportunities to try out different teaching approaches in the classroom. Guidance is expected from both experienced teachers and ITs. The objectives of the CTS are:

1. to help STs adapt to the environment of the school
2. to help STs understand the pupils they are going to teach
3. to allow STs and CTs to observe each other's lessons and discuss teaching strategies
4. to allow STs and CTs to share each other's experiences
5. to help STs plan lessons and deal with pupils' problems

The CTS took place in the second semester for 4 weeks as the second block of School Experience. (The first block of School Experience was scheduled for the first semester in the form of Attachment during which STs spent 2-3 days in a kindergarten and 5 days in a primary school). Under the CTS each ST was assigned at least one CT who was expected to carry out the following roles:

1. **advisory role**
    - provide STs with background information about pupils. duties of a teacher and availability of resources in the school
    - help STs learn from lesson observation and related activities
    - help STs plan lessons and carry out follow-up work
    - help STs evaluate and reflect on their own teaching
2. **counselling role**
    - provide STs with personal support when needed
3. **administrative role**
    - schedule different kinds of activities for STs during the Teaching Practice period
    - liaise with ITs
    - help STs work out a scheme of work for the Teaching Practice period
4. **socializing role**
    - work collaboratively with STs
    - help STs liaise with other teachers

In its first year (1994-95) of operation. the CTS was divided into three phases. Phase I (Orientation) normally took up the first two to four days during which STs observed the CTs' lessons Class observation was followed by post-lesson conferencing. Phase 2 (Collaborative Teaching) lasted four to six days. During this period, STs and CTs worked collaboratively in planning, preparing and teaching lessons. This prepared the in Phase STs for independent teaching inPhase 3 (Independent Teaching) which spanned over two to three weeks. In this phase. the CTs observed the STs' lessons and guided the latter to reflect on their performance in post-lesson conferencing.

A Comparison between CTS 94 95 and CTS 95-96

Some changes to both the philosophy and implementation of the scheme were made in its second year of operation (1995-96). Firstly, the 94-95 cohort had their first two blocks of School Experience in two different primary schools and had more exposure to different kinds of schools. whereas over 80% of the 95-96 cohort went to the same school for better coherence of the programme. Secondly, the three phases were merged for the CTS 95 96. In other words, STs might start teaching independently from the first day. The operation resembled the traditional Teaching Practice. Thirdly, the number of lessons to be observed by both CT and ST was reduced, implying that less support was sought from CT. A fourth difference was the reduction of the number of lessons for collaborative teaching. In actual fact. cooperation rather than collaboration was called for.

All in all, the essence of CTS was taken away in 1995-96. It is understood that the change resulted from an attempt to counter-balance the apprehension CTs experienced in the previous year. The question Is whether the change helps the Scheme develop and better enables the STs to learn during their time in school. The changed Scheme bearing the same name of CTS is worth our concern.

Purpose of the Study

This is the second part of a series of studies on the CTS described above. It aims at reviewing the development of the scheme over the two years. The perceptions of CTs and STs on the usefulness of the roles of the CT were measured. The difference between the results of the two years was examined.

The discrepancies found were explained and factors which might have affected the perceptions of the various parties were discussed.

METHOD

Cooperating Teacher Scheme 94-95

In the first year of the study. investigation was conducted in the form of a questionnaire survey. Two similar questionnaires were administered after the Teaching Practice, They aimed at collecting the views of CTs and STs respectively on the support provided by the CTs in facilitating the professional development of the STs. Nineteen items on the role of the CT were listed. Both parties were requested to rate the usefulness of the individual item on a 5 point Likert scale (5 'very useful'. 4 'useful'; 'not sure'; 2 'of little use'; 1 'of no use'),

A separate section of the questionnaire solicited the CTs' views on the proposed support system. Given a choice of 4 items and an open ended item for free response, the CTs indicated their preferences by choosing one or more forms of support. A number of proposed incentive systems were also listed in the questionnaire. CTs were invited to choose one which they felt would encourage teachers and schools to participate in the CTS.

The questionnaires were sent to all the schools participating in the CTS in the week following the end of the Teaching Practice, Out of the 85 schools. 79 responded, A total of 546 questionnaires were returned from the CTs. Questionnaires were also distributed to the STs in the Practicum Seminar that immediately followed the Teaching Practice. A total number of 41 I questionnaires were received.

The two sets of questionnaires were then sampled for analysis of data. The sampling was done on a school basis. Two questionnaires were randomly drawn from the returns of each school for both the CT group and the ST group. With some schools, only one questionnaire was drawn as there was only one returned. As a result, a total of 155 questionnaires from the CTs and 169 from the STs were sampled for the purpose of the study.

Cooperating Teacher Scheme 95-96

The two questionnaire surveys were repeated in the second year of the study, Similar procedures and sampling methods were adopted as in the first year. A total number of 280 questionnaires from the CTs and 252 from STs were included in the sample for the study,

The questionnaire surveys conducted in the second year of the study were supported by interviews to increase the credibility of the investigation results. Seven CTs and one protege of each were randomly selected from the sample and interviewed, Both groups of subjects were asked eleven questions extended from the questionnaire. but they were given free rein in their individual responses.

RESULT

The role of the Cooperating Teacher

Generally speaking, the surveys conducted in the two years yielded similar results, The findings of both surveys indicated that the CTs consistently perceived that the support they offered to the STs helped the latter to develop professionally to a great extent The responses of the STs tended to be more diversified, but in general they perceived that the various kinds of help they received were useful.

The ST's ratings of the Scheme for the two years were largely similar. The most highly rated items remained the same, namely 'provide ST with personal support', 'provide ST with information about pupils and class'. 'allow ST to observe CT's lessons'. 'discussion after ST observes lessons of CT'. observe lessons of ST' and discussion after observing lessons of' ST'. However the ratings of these items were slightly lower in the second year than they were in the first year.

The responses of the CTs in both years were quite consistent for all items. with the trend of them giving even more favourable responses this year, As a matter of fact. in the second year they rated their roles in the Scheme slightly higher in terms of usefulness than the STs did.

The findings from the interviews corroborated with those of the questionnaire-survey All the CTs interviewed agreed that they had played their part in contributing to the success of the Scheme CTs perceived that their contribution was best in helping ST to solve immediate classroom teaching problems and giving tips for teaching situations on a procedural level. Helping STs to develop pedagogical content knowledge and understanding of a teacher's role and the school curriculum, were not regarded as useful functions of a CT.

STs interviewed all appreciated the help and support offered by the CTs. They suggested that from lesson observations. they learned about the pupils they were going to teach, procedural matters like classroom routine and how to deal with pupils' problems in class. Some of the STs expressed that they were impressed by the professional commitment of the CTs. The majority reported that while Institute tutors could give them suggestions on a wide range of teaching methods. CTs' advice was more practical and more practicable, CTs were also found to be more understanding then ITs as they understood clearly the practical constraints in the reality. Although some STs claimed that they had better confidence in those who based their advice on research findings, they asserted that CTs could provide them with immediate help to solve classroom problems.

The most significant feature of the findings was that both groups rated most highly and invariably the items which were *directly related to pupils and classroom teaching* These items matched with those which STs rated most favourably in both years, i.e. providing STs with personal support and information about pupils and class, observing each other's lessons and post-lesson conferencing. On the other hand, ratings were consistently low for those items that were *of a liaising and socializing* nature for instance. keeping in contact with ITs' and 'helping, STs liaise with other teachers'. In between these two categories there were those items which both CT's and ST s perceived as *'not* sure' consistently over the two years. Roles *related to the STs' professional development* such as planning of lessons with ST's collaborative teaching, understanding the role of teacher and curriculum of school as well as evaluation and reflection on teaching all fell into this category.

Open ended responses from CTs revealed that although the CTS is based on a theoretical framework of close partnership between the CTthe ST. and the IT both the first and second parties perceived that liaison between the CTs and the ITs was not properly done. Interviews with STs suggested that communication between the CTs and the STs depended on whether STs actively approached CTs. However, STs tended to retreat from contacting CTs when they saw that the CTs were busy.

Support and Incentive Systems

The responses to the support system over the two years were on the whole similar. The highest frequency went to 'school-based' talks on the CTS.' The next item on the list was 'disseminating the idea of CTS through seminars'. ' Mentorship training' came third for both years, but there was a drop from 59 4% in 94-95 to 41.0% in 95-96. The least sought of support was 'CTs' free access to the Institute Library.

The responses to the various forms of incentive in the two years of the study were very similar, The best received incentive was the exemption of credit points for pursuing further studies as a formal recognition of their contribution to the Scheme. Monetary reward in the form of allowances came second, while 'priority given to CTs to attend in-service courses' tagged behind. The least attractive reward was in-service school-based training programmes offered to participating schools.

The results obtained in the interviews with the CTs corresponded with those drawn from the questionnaire-survey The CTs consistently perceived little need for professional support. What they regarded as most useful was briefing on the operation of the CTS. in addition to information on the background of the STs and the course curriculum. There was little enthusiasm shown for the incentive systems proposed. In general, the CTs felt that the support and incentive systems had little effect in encouraging, teachers or schools to participate in the CTS.

DISCUSSION

From the results, we can see that CTs' acceptance to participate in the CTS has risen. The CTs were more sure of the usefulness of the Scheme in the second year, and more willing to participate in the Scheme in the future However the increased acceptance did not seem to reflect that the quality of help received by STs was equally improved. There was a slight drop in the second year for items which STs rated most favourably. It could be inferred that the quality of help might be in question.

Comparing the ratings of the CTs over the two years. we found a pattern worth mentioning. We found no great change over the two years. Of the various roles of the

CTs, they consistently perceived only some of them as useful, some of them as "not sure", and the rest as "of little use". The useful items were directly related to pupils and classroom teaching, Those items which received medium ratings (not sure) were related to STs' professional development, such as 'helping ST reflect on teaching", The items which received the lowest ratings were related to liaising and socializing with ITs. They were both concerned with CTs' liaison work such as 'helping ST liaise with other teachers" and "keeping, in contact with ITs". The phenomenon suggested that the CTs held unchanged views towards the CTS. despite changes made to the mode of implementation of the CTS 95-96. (Changes included merging the three phases, reducing the number of lessons observed both by CTs and STs, and reducing the number of lessons for collaborative teaching.)

The CTS aims at preparing STs to be reflective practitioners through the collaborative effort of the school and the Institute, but the result did not seem to reflect that the aims were achieved. To what extent do CTs understand the Scheme? How ready are they to give active assistance? What factors affect their perception? Are there any changes in perceptions over the two years? The following is an attempt to answer the questions from the cultural. institutional and personal perspectives.

Cultural Factors

A major barrier to the success of the CTS in Hong Kong at this stage is the professional climate, Many teachers in Hong Kong are used to doing their own jobs individually as the culture of collegiality has not yet been established, The idea of collaborative work with colleagues in the workplace is not widely practiced. To work alongside the STs is something new to the CTs. It is. therefore. not surprising to find that CTs did not value collaboration and found it difficult to make contribution towards this end.

Most of the teachers in Hong Kong do not believe in the sharing of responsibility for teacher education; they believe that this should be the sole responsibility of the Institute. CTs have little exposure to the latest trend and development in teacher education. Due to the lack of awareness of the need for change. they did not accept the change as readily as they should, When new demands were made on them, they felt uncomfortable in carrying out the duties. They were only at ease with giving basic information and facts. Despite our explicit aims at helping STs develop reflectivity, CTs were not ready to help STs reflect on their work. It is not uncommon to find that we Chinese are reluctant to put forward our suggestions and opinions in relation to controversial issues. This characterizes our cherished wish to minimize conflicts with other people by avoiding arguable issues.

The CTS aims at introducing and fostering partnership and collaboration between schools and the Institute. To the majority of CTs such a concept only found acceptance at the enabling level but not at the action level. The seemingly increased acceptance of the Scheme by the CTs probably only indicated passive acceptance. This also explains why items requiring the exercise of new skills such as "working collaboratively with ST", "helping STs reflect on teaching", "keeping in contact with ITs" received only medium to low ratings throughout the two years. Establishing partnership and collaboration through sharing and cooperation constitutes the essence of the CTS, however, when this is not achieved, the success of this Scheme is put at stake.

583

Institutional Factors

Similar to some overseas studies (Beswick et. al. 1980; Applegate and Lasley, 1982, Martin and Wood, 1984), this study has identified certain items which both CTs and STs have consistently given low ratings over the two years. These items have revealed the inadequacy of collaboration between the two parties. The possible causes of these low ratings were time constraints and heavy workload of the CTs. In Hong Kong, primary school teachers have always been very busy, Right now, a number of innovations are in full swing such as 'School Management Initiative", "Target-oriented *Curriculum*". *Primary school teachers are, therefore, inundated with a lot of extra* work, in addition to their normal duties. This is an undesirable situation which must be rectified if improvement in the CTS is to be made, otherwise, even if CTs' acceptance of the Scheme rises, they will still not be able to devote as much attention and give as much assistance to the STs as they would like to. Consequently the level of assistance rendered to STs by CTs remained at the basic level of providing hard facts, instead of at a higher professional level.

CT's now do play a more active role in the process of educating STs in their workplace than they used to do in the traditional Teaching Practice, e.g. mutual observations of lessons between CTs and STs was something which was rather uncommon before the introduction of the Scheme. However, when we analyzed individual items. we found that CTs might not have attached as much importance to their role as the Institute did. The CTs' perception was much affected by the lack of understanding of the Scheme itself, a misrepresented perception of their own role, insufficient experience in supervising adults and above all, their philosophy of teacher education. As a result, the Scheme did not move forward in the second year.

In both years, most CTs have perceived the need for a briefing on the CTS, but less than half of them wanted to be given mentorship training. The need for support when implementing an innovation is directly related to the novelty of the innovation perceived and the extent to which one is committed to bringing it to success. The response of the CTs to the support proposed revealed their degree of readiness to further extend their help in educating STs. Complacent with their roles they were performing and the help which they could offer. they were less willing to commit themselves to share new responsibility and take up more professional roles in the education of teachers This situation seems to fall short of the aspiration of the Institute which aims at establishing and fostering partnership between schools and the Institute, in line with international developments in the Practicum. It is hoped that the Scheme could finally develop into a mentoring system. with the CTs taking a proactive role in the education of teachers in the School Experience component.

In relation to the incentive system, no one incentive was considered particularly attractive in both years. In the interviews and from the open-ended responses, some CTs mentioned that the job of a CT was easier than expected. Although specific requirements were laid down in the CTS Handbook, there was no monitoring of the CTs' work. They believed that rewards were not needed because the work required of them was far from heavy. On the other hand, the result could be interpreted as a token of identification with the concept of mentorship - a mission to help in the education of the next generation of teachers. Some of them did not welcome the job at the beginning because they were by the majority appointed to the task by the school heads adopting whatever criteria there might be. However, while and after doing it, they gradually developed a genuine interest in the job and began to like it. The satisfaction derived and sense of achievement in observing the professional growth of the STs under their care provided sufficient reward.

Of the various roles of a CT. the liaison role of a CT was found to be unsatisfactorily discharged in both years. The concepts and rationale of the CTS was disseminated through one three-hour seminar and relevant Handbooks, This might not be adequate for CTs to fully understand their liaison role. Liaison between CTs and ITs is crucial for the professional growth of STs. Role ambiguity between the CT and IT may account for the absence of such liaison in both years.

Personal Factors

CTs held preconceptions of learning how to teach. Some learned by immersion themselves a method which they found acceptable. This preconception influenced the way they helped the STs, consequently, the kind of support which they provided to their STs resembled what they received in the old days. Others approved of learning to teach through modelling and direct coaching. hence. they were willing to open their classrooms and to observe their STs' lessons, This acceptance is attested by our findings over the two years with high ratings tended to cluster around items related to the usefulness of mutual observation of lessons and post lesson conferencing.

In Hong Kong, primary and secondary students tended to learn through passive reception, When these students came to the Institute. they carried forward this attitude and expected to be told exactly how to teach, Reflection to them was a complete novelty. Without proper reflective skills' the chance that they would make use of reflection to enhance teaching can only be low,

From our interviews with CTs. we found that they wanted more contact with the ITs. However. in the present course under discussion. with over 40 ITs. it is inevitable that there are diversified views among them, They may hold different conceptions of the CTS. and hence discharge their duties according to their own philosophy. Uniformity of approach is relatively difficult to achieve among autonomous professionals As a result of the lack of communication between the CTs and the ITs, the free flow of knowledge, which was meant to encourage reflection. contributed by the two parties for the benefit of the STs was not made possible.

RECOMMENDATION

Educating future teachers as a collaborative venture is beginning to gain acceptance now. The collaborative venture must have the enthusiastic participation of all relevant parties. i.e. the ITs. the CTs and the STs. They should form a cordial triadic relationship with the fourth party, the pupils, as the centre of concern, In order that reform in teacher education can become a success, the perceptions of all relevant parties must change accordingly in the first place. In other words, a change in perceptions is a prerequisite to a change in actual practice. However, in our studies over the two years. we have found no such change in perceptions among any of the three parties. This means that our newly-introduced CTS still has a long way to go before it can claim any success.

Phasing In the Innovation

Despite some gain in acceptance of the Scheme by the CTs over the two years, not much improvement in the quality of help was evident. The form might have been made more well-known now. but the essence was not. Nevertheless, we do see potential for development of the Scheme. We, therefore, suggest a gradual process of development for the Scheme.

Dissemination of Partnership Idea

In the context of Hong Kong, bearing in mind the traditional distant relationship between the Institute and the schools. the innovation calls for better collaboration. Briefing sessions and promotion seminars could only provide information about the operation of the Scheme. Conceptual and attitudinal issues must be addressed at a higher level to foster genuine partnership. Recent trends in teacher education and concepts of partnership could be conveniently imparted through refresher courses. in-service bachelor of education programmes, etc.

Selection of Cooperating Teachers

Ideally, CTs should represent experienced and good teachers; they may be the first teachers that the STs observe from the other side of the desk. The selection of CTs, therefore, should be done with great care and caution. Would it be more desirable if the CTs volunteered for the post? In Hong Kong, the norm is that CTs are selected by their headteachers with or without consulting, the teachers concerned. It cannot be denied that a strong sense of commitment on the part of the CTs is vital to the success of the Scheme. The way the CTs should be selected must be reconsidered by all the parties concerned. We Suggest the adoption of a whole-school approach which can create supportive rapport among colleagues and encourage involvement on a voluntary basis,

Training and Support

The aim of the CE Primary course of the HKIEd is to help STs develop into reflective practitioners. CTs are expected to facilitate STs to reflect on their teaching. Has the Institute clearly informed them of this role? Are they able to act as a facilitator? Is there a gap between what the CTs do and the aspirations of the Institute? The lack of knowledge and skills may explain the gap, hence, training is needed. Training should meet the needs and abilities of the CTs. the exact forte should be negotiated and agreed between the Institute and the school.

In addition to training, support from all pertinent authorities should be made available to CTs. Regarding schools, if they could keep to the ratio of I CT to I ST, the former would have more time to render help to the latter. Regarding the Institute, it should establish closer contact with the schools ITs should try to support the CTs in ways that both parties see fit. The education authority in Hong Kong might also be able to help by encouraging more schools to participate in this Scheme.

Equal Partnership

Reform in Teaching Practice involves a fundamental change to the design, organization and management of the curriculum. It requires a much more substantial and continuous contribution from teachers. If schools had played an equal part with the Institute in this curriculum innovation, the outcome would have been much better. partnership cannot be maintained on inequality. Involvement of schools does not merely mean the Institute telling the CTs what to do, schools should be involved in the planning and organizational facets as we. This joint venture will transform the relationships of all parties within teacher education · a true partnership working together to make sense of teacher education.

References

Alexander. R. (1990). Partnership in initial teacher education: confronting the issues. in Booth M.B., Furlong V. J. & Wilkin M. (Eds.) Partnership in Initial Teacher Training. London: Cassell.

Anderson. R.. Law, A. & Wong, C. (1995). The role of the cooperating teacher: matches and mismatches between cooperating teachers and student teachers'. Proceedings of International Teacher Education Conference Hong Kong.

Applegate, J. H. & Lasley, T. J. (1982). 'Cooperating teachers' problems with preservice field experience students'. Journal of Teacher Education, 33(2).

Beswick, D.G., Harman G. S., Elsworth, G. R., Fallon, B.J., & Woock, R. R. (1980). 'Australian teacher educators and education policy: a national study of the views and characteristics of academic staff f and practicing teachers who contribute to teacher education'. Melbourne, Australia: University of Melbourne, Centre for the Study of Higher Education.

Furlong. V. J., Hirst, P.H., Pocklington. K. and Miles, S. (1988). Initial Teacher Training and the Role of the School. Buckingham: Open University Press.

McIntyre, D. & Hagger, H. (92). 'Professional development through the Oxford Internship Model'. British Journal of Educational studies, 40(3).

Martin R.E. & Wood. G. H (1984). 'Early field experiences: unifications of cooperating teachers' and teacher education students' diverse perspectives' Paper presented a' the meeting of the American Educational Research Association, New Orleans,

Maynard, T. and Furlong, J. (1993). Learning to teach and models of mentoring. In D. McIntyre, H. Hagger and M. Wilkin (Eds.) Mentoring: Perspectives on School-based Teacher Education, London: Kogan Page.

Schon. D. A. (87). Educating the reflective practitioner: toward a new design for teaching and learning in the professions. San Francisco: Jossey-Bass.

Shulman, L. S. (1987), 'Knowledge and teaching: foundations of the new reform Harvard Educational Review, 57 (I).

Wilkin, M. (1992). On the cusp: from supervision to mentoring in initial teacher training'. Cambridge Journal of Education, 22 (I).

Yates, J. W. (1981). 'Student teaching in England: results of a recent survey'. Journal of Teacher Education, (32 (5).

PROFESSIONAL TRAITS NEEDED FOR CAREER SUCCESS: HOW IT RELATES TO THE EDUCATION OF FUTURE WORKERS

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A successful business career involves much more than simply mastering business functions. According to Smith and Boyd (1986) success in working requires an awareness and understanding of such factors as the job acquisition process, time management, effective listening skills, verbal and non verbal communication competencies and assuring professional responsibility.

Charner (1988) listed several factors that identify why school leavers were not hired by employers for entry-level jobs. Factors identified are:

Low grades and low level of academic accomplishment, poor attitudes and self confidence, lack of goals and poorly motivated, lack of enthusiasm, lack of drive, little evidence of initiative, inability to express self, poor speech presentation, lack of maturity and no evidence of leadership potential.

In addition to that Charner claimed that they show excessive interest in security and benefits, unrealistic salary demands and expectation. Zakaria et al, (1996) also found that factory workers in the district of Hulu Langat tend to place high importance on work values such as job security, career development and economic returns.

Brower (1979) stated that attention should be devoted to non-technical employment competencies for inclusion in the courses of study in business education programs. This is supported by Luft (1986) who mentioned that nontechnical employment competencies can be viewed as an important dimension reflecting the degree to which an individual will be successful in his/her chosen occupation. He suggested that business educators be aware of the importance of presenting a well-rounded carricula to their students so that the students will be able to function effectively in all aspects of employment. He also found in his study that business educators placed the least emphasis on the non-technical employment competencies related to stress management. Taking into consideration the preparation of future workers, it is suggested that the next wave of educational reform should consider the inclusion of world of work values and attitudes in the school curriculum.

The importance of humanistic values in preparing future workers cannot be denied. Bacharah (1990) mentioned that humanistic values are universal values such as love, loyalty, coverage, devotion piety, peace, tolerance, respect, and compassion. These values give dimension, scope and meaning to being human. Luft (1986) had identified human relation principles needed for career success as to develop positive self concept, accept criticism, resolve, conflicts, cope with change, cope with prejudice and discrimination, understand sources of values, understand ones' own values and accept the value of others.

Another important area that should be given emphasis is communication. Flatley (1990) indicated there is an increased in demand by business for their employees to be competent in both written and oral communication skills. They noted that good communication skills are the basis for development of other skills. Other aspects to be considered as professional characteristics are as mentioned by Simon and Chaney (1991). The trait areas needed for job success include attitude and human relations, professional appearance, office etiquette, business ethics, and time management. They suggested that these areas should be incorporated in the capstone courses to give students a competitive edge in today's job market. Currently, little research especially in Malaysia had given emphasis on the importance of professional traits for career success and how this important component being infused into the present school curriculum.

The purpose of the study

The purpose of the study was to determine the possession of professional traits needed for career success as perceived by the industrial workers in the district of Hulu Langat, Selangor. In order to achieve this purpose, the following research questions were asked.

I) To what extent do workers perceive they possess the professional traits needed for career success?

II) To what extent does the perception of respondents being influenced by their age, educational grade, marital status and gender?

The findings of the study can be used by employers and entrepreneurs as a guide to understand how the workers perceived their professional traits and personality. Also, educators can use the finding for the enrichment of school curriculum especially in courses related to vocational and technical fields where students are prepared for the world of work.

Methodology

The study utilized a descriptive - correlational study. The population was the industrial workers working in factories in the Hulu Langat district. The sample size was determined by using the formula given by Cohran (1977).

Based on the formula, an unkown number of population with the degree of precision at 95% and an error of 5%, the required sample size was 400. Cluster random sampling technique was used to determine the sample. The companies in the district of Hulu Langat were randomly selected. The workers in the selected company were than randomly selected to become participants of the study. All together 451 workers participated in the study. A structured questionnaire was used to collect the data from the respondents.

A questionnaire for the study was developed based on the modification of questionnaire initially developed by Luft et al (1987). There were 5 professional trait areas to be measured namely: problem solving, stress management, professional characteristics, communication and human relation principles. The response format for each trait area used a four - point likert scale with the following choice: (1) low (2) medium (3) high (4) very high.

The questionnaire was then sent to a panel of expert consisting of lecturers of the Faculty of Educational Studies, University Pertanian Malaysia, to be reviewed and commented. This was done to determine the content validity and clarity of the survey instrument. The questionnaire was then pilot tested with a group of 25 workers who were not included in the study. The reliability coefficient for each trait area was determined by using cronbach alpha. The reliability coefficient for the overall trait was .86. The data were analyzed by using the statistical package for Social Sciences (SPSS) for windows Version 6.1. The descriptive data were analyzed by using frequencies and

594

standard deviation. The relationship between respondents' perception of possession of professional traits and age, was determined by using Peason Product Moment Correlation Coefficient (r). The point biserial correlation coefficient (rpb) was used to determine the relationship between perception and gender, education gred and marital status. T-test was used to determine differences in the workers perceptions based on their demographic background.

Table (1)
Demographic information of respondents

	n	%
Gender		
Males	242	53.7
females	209	46.3
Ethnic group		
Malays	393	87.2
Non Malays	58	12.8
Age		
25 and below	276	61.2
26-35	139	30.8
36 and above	36	8
Marital status		
Married	145	32.3
Non-married	306	67.7
Educational level		
Primary school	16	3.4
Secondary school	297	66.0
College	46	10.2
University	92	20.4
Present salary		
RM500 and below	144	31.9
RM501-RM1000	192	42.6
RM1001-RM1500	60	13.3
Above RM 1501	55	12.2

Table 2 indicated in general that the workers perceived they possess only a "medium" level professional trait which are needed for a career success. The only trait which was perceived as high is professional characteristics (x=3.07) and the lowest is for problem solving (x=2.68).

Table (2)
Mean for overall perception of each component of traits as perceived by industrial workers

Traits	x	s.d
Problem solving	2.68	.60
Stress management	2.69	.61
Human relation	2.88	.56
communication	2.99	.61
Professional characteristics	3.07	.49
Overall perception	2.89	.48

Scale : (1) low (2) medium (3) high (4) very high

As indicated in table 3, both males and femaleworkers were having "medium" traits necessary for career success. However, males perceive themselves as high in possession of communication and professional characteristics. Male showed significantly positive traits than females.

Table (3)
Comparison of means for possession of traits as perceived by industrial workers based on gender.

Traits	Group	x	s.d	t-value	Sig.
Problem solving	Male	2.802	.64	4.77	.000
	Female	2.536	.54		
communication	Male	3.079	.63	3.35	.001
	Female	2.88	.56		
Human relation	Male	2.95	.56	2.86	00.4
	Female	2.80	.56		
Stress management	Male	2.76	.64	2.81	00.5
	Female	2.60	.57		
Professional characteristics	Male	3.14	.51	2.97	.003
	Female	2.99	.46		
Overall perception	Male	2.98	.49	3.99	.000
	Female	2.79	.44		

Table 4 indicates that marital status does not attribute significant difference on the perceptions of the respondent except "problem solving". Married workers exhibited significantly more positive perceptions on problem solving than unmarried worker did. This difference is significant at .01. Married workers displayed more positive perception on communication and professional characteristics but the difference is not significant.

Table (4)
Comparison of means for possession of traits as perceived by industrial workers based on marital status

Traits	Group	x	s.d.	t-value	Sig.
Problem solving	Married	2.78	.58	2.69	.008
	Non married	2.62	.60		
Communication	Married	3.03	.63	1.11	.270
	Non married	2.96	.59		
Human relation	Married	2.86	.57	-.40	.692
	Non married	2.89	.55		
Stress management	Married	2.70	.62	.18	.85
	Non married	2.68	.61		
Professional characteristics	Married	3.09	.51	.48	.63
	Non married	3.06	.48		
Overall perception	Married	2.91	.49	.62	.54
	Non married	2.88	.47		

Table 5 indicates that educational grade exhibited a significant difference on all the trait areas. Generally, the college-educated workers possessed more positive perception compared to secondary school graduates.

Table (5)

Comparison of means for possession of skill as perceived by industrial workers based on educational level

Traits	Group	x	s.d	t-value	Sig.
Problem solving	Secondary	2.61	.60	-3.82	.000
	College	2.84	.57		
Communication	Secondary	2.90	-62	-5.10	.000
	College	3.1	.52		
Human relation	Secondary	2.82	.57	-3.29	.001
	College	3.00	.51		
Stress management	Secondary	2.62	.62	-3.44	.001
	College	2.83	.58		
Professional characteristics	Secondary	2.99	.50	-5.17	.000
	College	3.24	.42		
Overall perception	Secondary	2.81	.48	-4.89	.000
	College	3.06	.43		

Table 6 indicates that age do have certain effect on the perception of workers. Older workers have a positive perception than younger workers. Older workers displayed significantly more positive perception from younger worker on communication and problem solving.

Table (6)

Comparison of means for possession of skills as perceived by industrial workers based on age.

Traits	Group	x	s.d	t-value	Sig.
Problem solving	Below 25 25 and above	2.60 2.79	.61 .59	-3.15	.002*
Communication	Below 25 25 and above	2.94 3.06	.58 .65	-1.89	.060*
Human relation	Below 25 25 and above	2.86 2.90	.54 .59	-.70	.48
Stress management	Below 25 25 and above	2.66 2.72	.61 .61	-.92	.36
Professional characteristics	Below 25 25 and above	3.06 3.09	.47 .52	-.67	.50
Overall perception	Below 25 25 and above	2.85 2.93	.46 .49	-1.60	.11

Table 7 shows the relationship between the identified independent variable (gender, age, marital status and educational grade). Gender was found to have a low but significant relationship with problem solving, stress management, professional characteristics, communication, human relation and overall perception.

Age was found to have a significant and positive relationship only with problem solving and communication. Marital status was found to have no significant relationship with all the traits. Lastly educational grade has a significantly low relationship with problem solving, stress management, professional characteristics, communication, human relation and the overall perception.

Table (7)
Relationship between variables

Skills	Gender (rpb)	Age (r)	Marital status (rpb)	Educ. (rpb).
Problem solving	-.21*	.20*	-.13	.18*
Stress management	-.13*	.04	-.01	.16*
Professional characteristics	-.14*	.04	-.02	.23*
Communication	-.15*	.11*	-.05	.22*
Human relation	-.13*	.04	-.02	.15*
Overall perception	-.19*	.10	-.03	.23*

Discussion

This study is congruent with Lufts (1986) who found that business employers found professional characteristics as the most displayed competency by their workers. He also found that business educators give more emphasis in classroom instruction to professional characteristics, but they give less emphasis on stress management. In the present study, it was found that the workers felt they possess less capability in the area of stress management and problem solving.

This study also has a consistent finding with Zakaria et al, (1996) who found that gender has been found to have a low but significant relationship with human relation values. The present study found that male workers seemed to perceive they possess human relation skills more than female workers do. Male workers also perceive they are more positive than females for having traits such as: problem solving , communication, stress management and professional characteristics. However, this does not support the finding of Solomon et al. (1990), which revealed that there were very few differences between the values of male and female entrepreneurs. There must be reasons why female workers exhibited less positive professional traits than male. Hall and Gordon (1973) found that woman's performance in her role and attitude are less positive if she works out of economic necessity rather than by her own choice. In general the workers in this current study had placed high importance on job security and economic returns and this could influence the perceptions of the female workers.

However, marital status was found to have no significant relationship with the overall perception on the possession of traits needed for career success. Another interesting finding of this study is that educational level was found to have a low but significant relationship with problem solving, stress management, professional characteristics, communication, human relation and the overall perception, where college graduate have positive perception compared to secondary school graduates. Something need to be done to improve the skills of our future workers especially in oral communication. Several studies had focussed on the importance of oral communication skills for career success (Willmington, 1989 and Bradshaw & Chaney, 1992) and this important component should be incorporated into the school curriculum so that secondary school students can learn strategies for becoming successful in career. College graduates are usually exposed to more courses that deal with communication and other traits compared to secondary school leavers. This could explain the reason why colleage graduates are more positive in the possession of traits than secondary school graduates.

CONCLUSIONS

1. In general, the industrial workers in the district of Hulu Langat displayed "medium" level of professional traits needed for career success. The least displayed trait was "problem solving" and "stress management".
2. Perception of industrial workers regarding professional traits necessary for career success differs significantly according to gender and educational level. Male workers have more positive perception than females, and college-educated workers have more positive perceptions than females, and college-educated workers have more positive perceptions than secondary school graduates do on all the trait areas.
3. No significant differences were found in regard to marital status with the exception of problem solving, where married workers tend to have more positive perception. Also, no significant differences were found in regard to age except for "problem solving" and "communication". Older workers exhibited more positive perceptions than younger workers did.

RECOMMENDATION

1. The identified and validated professional traits should be infused in the secondary school curriculum to ensure that students are prepared for the employment world. Infusion should not only be made for the vocational and technical courses but also in other academic subjects.
2. Further research on the topic should be conducted to further confirm the findings of this study. Besides, study should be conducted with different groups of worker in different localities in order to look at the similarities and differences of the traits possessed by these workers.
3. Society, especially employers should play important roles in ensuring that these traits were given to their workers. Courses or some kinds of training should be conducted for this purpose.
4. Such and important skills which received less score by the worker should be taught to youth and adults in school, employment, and training agency setting. Because as mentioned by Smith and Boyd (1986), majority of employees were dismissed or refused for promotions, not because they do not possess the required job skills and knowledge, but due to the lack of professional traits and characteristics needed for career success.

References

Bacharah (1990) in Wan Mohd. Zahid bin Mohd. Noordin's paper entitled "Values as an integral component of Education to face the challenges of the 21st century" presented at the sixth MINEDAP Conference, 21-24 June 1993.

Brower, W.A (1979). Emphasize the non technical aspects of office work. "Business Education Forum", 33 (6), 10-12.

Charner 1 (1988). Employability credentials: A key to successful youth transition to work. "Journal of Career Development".

Cochran, W.G. (1977). Sampling Techniques (3rd ed) New York: Wiley.

Flatley, M.E. (1990). Team presentation skills: Essential tools today. "Business Educaiton Forum" 45 (2), 19-21.

Hall, G.T. & Gordon, F.E (1973). Career choices of married woman: Effects on Conflicts, role behavior and satisfaction. "Journal of Applied Psychology", 58, p. 42-48.

Luft R.L Schoen J.L (1986). Non technical Business employment competencies in Illinois. "The Delta Pi Epsilon Jounal", vol xxxviii, 3, p. 147-157.

Simon, J.C. & Chaney, L.H. (1991). Integrating essential extra in office procedure courses. "Business Education Forum", 45 (5), 41-42.

Solmon, G.T. and Fernald, L.W. (1991) Trends in Small Business and Entrepreneurship Education in the United States. "Entrepreneurship Theory and Practice", Spring 1991: 25-39.

Smith M.K and Boyd D.R. (1986). Training students for complete career success. "Business Education Forum", May 1986. P. 32.

Zakaria Kasa and Zaidatol Akmaliah Lope Pihie (1996). Work values of the Factory Workers in the District of Hulu Langat. Research Report in the Faculty of Educational Studies. UPM Serdang.

A NEW APPROACH TOWARDS EFFECTIVE SCHOOL-BASED TEACHER DEVELOPMENT

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Palestine

INTRODUCTION

Technological advancement and national prosperity can be achieved through continuous educational reforms that lead to excellence in education. Among other elements, educational reform involves up-dating curricula and teacher development. This paper will focus on developing teachers through involvement in action research. Numerous articles regarding theories (Prawat, 1992) and (Singh, et al., 1996), schemes (Guskey, 1985), models (Edwards, 1995), strategies (Balkis, 1996), case studies (Martens, 1992), (Jensen, 1996), (Safz, et al. 1996) and (Gauna, 1995), approaches (Darrah, et al. 1988) and successfully implemented programmes (Ethchberger, 1992) directed towards teacher development have been published. At the national and international level, the constructivists' approach to teaching teachers is attracting the attention of education policy makers as well as researchers. (Benson, 1989). Inadequate, ineffective, and insufficient methods of instructions currently applied being the main reasons (Prawat, 92). However adopting this approach requires changing the teacher's current beliefs and attitudes. This is not an easy task especially because these beliefs have been inherited for a long time, being the outcome of cumulative "successful" experiences. Furthermore, the constructivits' approach - which focuses on the learner as being the constructor of knowledge - is very different from the currently adopted approach which views the teacher as the dispenser of knowledge and learner as the receiver.

Based on the above, change is expected to occur only if teachers feel that the current methods are ineffective. This can be judged from the steady decreasing quality of results of their students. This should make them aware of the need to find alternative methods of instructions. Commitment to change vision and projection into the vision of the alternative methods are also necessary (Etchberger, 92).

Purpose

The purpose of this paper is to follow school-based action research as an alternative method to develop the professional competencies of 3 elementary school teachers. This paper, also, describes the attitudes, and concerns that accompanied the teachers during the process of changing their classroom practices and educational beliefs. Integrated curricula is our alternative that went hand in hand with teacher development to induce school reform.

Educational Setting

From 1967 until 1992 schools in the West Bank have been operated by the organizational bodies: the Israeli military government (Civil Administration) (62%), the United Nations Relief Works Agency for Palestinian refugees (UNRWA) 30% and private organizations (8%) Most of the educational policies and structures introduced by

Jordan are still in use Directly after the Oslo Accord signed by the Palestinian Liberation Organization (PLO) and Israel, the Palestinian National Authority (PNA) replaced the Israeli Civil Administration in the field of Education. Schools and school systems were badly affected by the lack of funds provided by the occupation authorities. Very few schools were built, in addition to the minimal maintenance of the existing schools received. Educational materials and equipment were scarce, and mostly obsolete, while class-rooms remained badly overcrowded. Teaching methods and teachers' skills were not developed adequately enough to meet student needs (Jarbawi, 1996). Finally, schools were frequently subject to closure for indefinite periods of time.

The current, unhealthy, poor quality educational atmosphere not only challenges the Palestinian Ministry for Education, but the researchers as well. The atmosphere is suitable for educational reform, which includes introduction of new procedures for staff development, new instructional methods as well as new curricula. In fact Palestinian teachers as well as parents and pupils are calling for school reform and are enthusiastic about it.

Preparation For School Reform

The need for educational reform was first recognized by Unrwa Field Education Department West Bank. The 3 units of the department mainly, Education Development Centre, (EDC), Educational Sciences Faculty (ESF), and practice school met during the summer of 1996 and decided to amend the practice teaching programme and staff development procedures. An important amendment was the decision of assigning two schools as professional developmental schools. These schools are to be considered as (Gardner, 1995):

a) laboratory schools for ESF research
b) demonstration sites for the display of good teaching and
c) practice teaching sites.

The said amendment lead to "launching" our research,

Methodology

A) The working team/qualitative data

This research commenced on September 1st, 1996. First set of results were completed on November 22, 1996. The team worked in a condensed manner on daily basis. All parties involved, ESF of Ramallah Women's Training Centre (RWTC), EDC, and Ramallah Basic School (RBS) are components of UNRWA Field Education Department/West Bank. High level of coordination between the three parties is required with special emphasis on the role of administrative team work (Dean/ESF, Principal/RBS, and Head EDC) and commitment to educational reform.

One of the researches is the Dean of ESF the other is a Faculty Instructor of ESF. The three elementary (grade 1 - 3) school teachers are from RBS. Thus, the team comprises the necessary elements to complete the training circle: An administrator, a university teacher (as a supervisor), school teachers (in-service trainers seeking professional development) and pupils where learning outcomes are assessed and verified Formal interviews with the selected teachers revealed that they:

1. differ in age, experience and competencies.

2. hold similar epistemological beliefs, that views the teacher as a dispenser of knolwdge and the learner as the receiver, the learner and the content are separate

and fixed entities, a successful teacher is in control, he/she manages the curriculum, runs activities and disciplines students.

3. share similar experiences in professional development with programmes conducted in a traditional fashion, that is based on attending weekly seminars and workshops and classroom observations, where they play the role of the receiver while the trainer is lecturing or demonstrating.

4. have some knowledge regarding integrated or inter disciplinary curricula. This knowledge is derived from attending workshops organized by Unrwa education department.

5. admit that quality of education is deteriorating as currently used educational instructions (traditional training programmes) are ineffective.

6. aware of the need for educational change, yet with different readiness, commitment, enthusiasm and willingness to try new practices.

Limitation

Team experienced the following limitations:

1. Currently used traditional curricula's philosophy, objectives, and content are so different from the proposed integrated approach. This necessitated extra effort and time for planning (Drake, 1993), development and psychological adjustment from all members of the team.

2. Teachers' heavy load, closely packed school schedule, crowded class-rooms and school environment that enforces students discipline (Brandt, 1991), and strict adherence to school text-books.

3. Teachers beliefs (Hashweh, 1996), and (Gallagher, 1991) and attitudes towards teaching.

4. Sickness of one of the school teachers which prevented her from the implementation of her proposed plan.

5. Passive, often negative, attitudes of parents towards cooperating with the teachers.

Approach

Staff development is crucial for educational change. The traditional, one shot workshops or seminars (that convene after teachers' working hours or during summer vacation) are currently applied in the West Bank. These programmes are generally described by the majority of teachers, as inadequate, insufficient, fragmented, boring, not motivating and discrete (10 years separation between training programmes is a common phenomenon). Besides, the programmes are usually imposed on teachers and do not fulfill the teachers needs. Teachers benefit from these workshops only on temporary basis simply because they "forget the content" and do not apply it in their practices, (lack of follow-up frosupervisors). To minimize the above mentioned limitations, an alternative school-base action research programme has been tried.

Up-dating curricula is the other crucial element that goes hand in hand with staff development to induce Educational reform. Integrated curricula is an alternative (Walker, 1995), (Fogarty, 1991), (Greene, 1991), (Burnkhorst, 1991) and(Vars, 1991) that:

a) makes a more efficient use of instructional time (Ravenowitz, 1993).
b) helps students acquire knowledge that is less likely to remain inert (Ravenwitz, 1993).
c) trains students to adopt multiple perspectives in solving problems (Ravenovitz, 1993).

For these reasons, integrated curricula and related classroom practices were the subject of the action-research in which not only the school teachers, but also the researchers were involved.

Research Progress

It is important to point out that during all stages of research:

1. each member of the team was involved in recording her comments, feelings, findings, recommendations ... etc.
2. members of the team met regularly and frequently.
3. prior to each meeting, investigators met and prepared written plans of action.
4. collaboration, reflection, mentoring , peer coaching and problem solving were used by members of the team while involved in action research.
5. all relevant accessible resources such as books, teaching and audio visual aids were used.
6. Data were collected from recorded formal interviews, questionnaires, video tapes etc…
7. RBS' school principal provided the necessary support to all members of the team. She provided a flexible teaching schedule to involved teachers and allowed them to practice the new teaching methods without interference.

Research Progress

Phase 1: Observation and Gathering Data

The research started by formal interviews with the selected teachers, the purpose of which was to collect data regarding: age, experience, competency, readiness to be involved in action research, beliefs, and back-ground information regarding integrated curricula and means of self-development.

Collected data were verified by attending their classes, which revealed that in spite of the fact that they were recently subjected to a workshop regarding integrated curricula, their classroom practices (traditional) did not reflect benefiting from it. Besides, the idea of integrated curricula was not clear to them. In this phase teachers were reserved, expected directions and instructions.

Phase 11: Conducting Action Research

The second phase constituted an induction study period. Relevant literature survey, video cassettes' survey and group discussions were carried out. Members of the team shared, exchanged and enriched their information regarding action research, integrated curricula and its related teaching practices. During this period trust, personal, and friendship-relationships developed We all looked at each other as members of a team who are keen on self development through collaboration. However, teachers attitudes were inconsistent. Their state of equilibrium regarding their beliefs about knowledge, teaching methods and educational systems was disrupted. As a result, they lost some of their self confidence, enthusiasm and willingness to continue. They developed their own doubts and seemed to be hesitant.

Phase III: Developing Proposals

Teachers were involved in developing two separate units following the integrated curricula models. One unit was about sound the other unit was about water. Their point of reference was the currently used lower elementary (grade 1 - 3) curricula. For example, the second grade teacher searched, listed and combined all subjects related to sound (in an integrated form) from second grade Arabic, Science, Math, Arts, Music and Religion text books. A proposal that included: the developed unit, teachers as well as pupils' responsibilities, time lines and evaluation procedures were then prepared. This was followed by group discussions for the purpose of study, reflection, recommendations and thorough evaluation that ended by consensus on the necessary enrichments and amendments.

This was the most difficult and slowest phase. Teachers seemed to be more motivated, confident and enjoyed the work. Statements like "I will continue to prepare the rest of the units in the integrated fashion" started to be heard. All teachers passed through the same gradual stages of change in perception and attitudes (with comparable rates) as they departed away from traditional into integrated curricula. Proposals were amended at least three times before reaching a consensus. They all started by simply arranging subject units in a sequential form. (i.e. the sound unit from Arabic text was followed by the sound unit from Science textbook...etc.). Teacher used the same activities mentioned in textbooks. They, then, performed some fusion in the units, introducing new activities that lacked innovation. Finally, they were free and went beyond the boundaries of a fixed starting, intimidate and final point. Proposals flew nicely with innovative activities. At this point teachers started to feel more relaxed and were eager to begin the next phase.

Phase IV: Implementation and Mentoring

Teachers as well as investigators intensively worked together. While teachers were implementing their lesson plans, investigators were attending, audio and videotaping the lessons. On daily basis, the whole team used to meet in the afternoons (after duty hours) to play the tapes. Concerned teachers used to reflect on their practices. This was followed by team discussions, evaluation and recommendations for specific amendments. In the first set of lessons, the following were observed:

1. While implementing their lesson plans, teachers were not relaxed (judged from their body-language). Aida reflected "my sounds' pitch is high".

2. Numerous activities were used to clarify one concept. Dawlat (the oldest, most experienced, known to be an excellent teacher) reflected: "in my next lesson, I must optimize the number of activities"

3. Aida (the youngest, least experienced, least competent) demonstrated the biggest and fastest response in departing from traditional teaching. She implemented most of the teaching techniques mentioned by Verlee Williams in her book. "Teaching for the Two Sided Mind" and made best use of group discussions, case studies and viewed tapes presented prior to implementing the proposed plan.

4. Teachers were still the centre of the teaching processes, they did most of the talking, directing questions, emphasizing facts and right answers. While students raced to be the first to answer. This shows that teachers' beliefs did not change yet. Actually, Dawlat reflected by saying "I did most of the talking in this lesson, but I had no choice since I was introducing new concepts", she added "this is the proper way of introducing new concepts at lower elementary level".

5. Desks were reorganized. Instead of being in rows, facing the wall they were organized in groups to facilitate interaction However, group interaction was not emphasized as expected. On the contrary teachers always instructed pupils to "every one should work a lone".

6. Pupils were over-whelmed by being free to move. They showed drastic positive change in motivation. Even the slowest learners enjoyed inter-action with the lesson. They were all keen on responding to teachers instructions.

7. Teachers were tolerant to "Loosing Control" over disciplining the pupils.

As time passed on, and more lessons were given, teachers looked more relaxed with the new method, yet worried about completing the curriculum and scared of the idea of a possible drop visit by a supervisor. Comments like "the supervisor will become insane if he sees the pupils talking and moving freely" were heard from Aida. Teachers also enjoyed pass too fast" commented Aida and Dawlat.

Towards the end of the unit, teachers seemed to be tired. "We worked too mach", "We are stressed out by the fact that we continuously think of ways to improve our performance. Our families, friends, relatives and colleagues atired from listening to us talk about the subject". "Don't you think that we should take a break and go back to traditional teaching? ?" Actually after giving 18 lessons, the investigators were astonished to walk in Aida's class and see her reverting to traditional teaching. At this moment, they were left to do what ever they liked. 10 days later we all met for the purpose of discussing, evaluating and making recommendations regarding the possibility of adopting the new approach. In the meeting, the investigators were astonished, yet happy to see that the teachers continued to follow the integrated approach during the last 10 days. They were also involved, on their own, in training colleagues and supervising the pre-service trainees of ESF (whom the teachers supervise while practicing teaching) on the new approach. The new method was, indeed, spreading in a form of "free radical chain reaction" Teachers commented "in reverting to traditional teaching, we felt like going back to darkness. They added "Even if we wanted to do so,our students would not have accepted". "Our students kept asking us what shall we bring for the next class" Students also were comparing and demanded other teachers to follow the new approach.

RESULTS AND CONCLUSIONS

The final evaluation session resulted in reaching a consensus on the following conclusions:

1. School based-action research is better than the traditional workshops/seminar in the professional development of school teachers. Teachers felt that they matured in field of education which was the result of:

   a) enrichment of knowledge in the various subjects they covered.
   b) in-depth understanding of learning styles and teaching techniques.
   c) gain of experience in finding the right, relevant and applicable resources (at this point they established small libraries in their classrooms). Also, working in a team in a collaborative form was most beneficial. It was a motivating, enjoyable experience that lead to self confidence and empowerment.

2. Integrated curricula will lead to educational reform. Teachers experienced the following advantages:-
   a) Instructional time, allotted for teaching the subjects which were integrated in the implemented unit, was less than the allotted time for the same subject when taught by the traditional method. In addition more efficient use of the instructional time was achieved.
   b) Teachers varied their methods of teaching and were more innovative in planning activities. They learned to be more flexible by showing less adherence to text books. They prepared working papers to complement their developed units.
   c) Students learned to acquire knowledge that is related to their environment and every day life. They enjoyed learning, showed better interaction and motivation.
   d) Students' individual differences were minimized.

3) Teachers responded faster than expected, probably due to the present unhealthy educational environment which is ripe for change. They changed their styles of teaching and were able to adopt the integrated curricula approach in a short period of time. They were convinced that lea learning outcomes were made better. As a result, their beliefs started to change. Actually they already started advocating the new approach to their colleagues, supervisors and the pre-service trainees whom the teachers' supervise while practicing teaching.

References

Balkis, A. (1996). Proposals for Development and Future Prospects. UNRWA HQ(A) Department of Education. Benson, G. (1989). Epistemology and Science Curriculum. J. Curriculum Ski Studies 21 (4), 329-344.

Brandt, R. (1991). On Interdisciplinary Curriculum: A Conversation with Heiydi Hays Jacob, Educational Leadership, 49 (2): 24 - 26.

Burnkhorst, B. (1991). Every Science, Every Year. Educational Leadership, 49 (2): 36-38

Darra, A. et al. (1988). Al Haqaeb Al Tadribieh. Arab Petrulium Training Institute. in Arabic Language

DE Gauana, P.R. (1995). Teachers' Professional Development as a Process of Critical Action Research. Educational Action Research, 3 (2): 183 - 194.

Drake, S. (1993). Planning Integrated Curriculum: The Call To Adventure, Virginia: Association for Supervision and Curriculum Development.

Edwards. C. (1995). The 4 X 4 Plan. Educational Leadership, 53 (3): 16 - 19.

Etchberger, M. and Shaw, K. (1992). Teacher Change as a Progression of Transitional Images: A Chronology of a Developing Constructivist Teacher. School Science and Mathematics, 92 (81): 411 - 417.

Forgarty, R. (1991). Ten Wasy to Integrate Curriculum, Educational Leadership, 49 (2): 33 - 34.

Gallagher, J. (1991). Prospective and Practicing Secondary School Science Teachers' Knowledge and Beliefs about the Philosophy of Science. Science Education 75 (1): 121- 133.

Gardner, W. (1995). Professional Development Schools: how well will they travel? Journal of Education for Teaching, 21 (3): 303 - 314.

Greene, C. (1991). Science Centered Curriculum in Elementary School. Education Leadership, 49 (2): 42 - 46.

Guskey, T. (1985). Staff Development and Teacher Change. Educational Leadership,42 (7): 57 - 60.

Hashweh, M. (1996). Effects of Science Teachers' Epistemological Beliefs in Teaching. Journal of Research in Science Teaching: 33 (1): 47 - 63.

Jansen, B., and et al. (1996). Action Research Networking and Environmental Education in the Netherlands: a challenging and successful action research strategy for educational reform. Environmental Education In the Netherlands, 195 - 210.

Jarbawi, T. 1996. The Importance of Education to Women's Economic Opportunities in the West Bank. paper presented at Council on Foreign Relation's Seminars , New York. U.S.A.

Martens, M. (1992). Inhibitors to Implementing a Problem - Solving Approach to Teaching Elementary Science. Case study of a Teacher in Change. School Sciences and Mathematics, 92 (3): 150- 156.

Prawat, R. (1992). Teachers' Beliefs about Teaching and Learning: A constructivist perspective. American Journal of Education, 100: 354 - 395.

Ravenowitz, M. ed.,(1993). Cognitive Science Journal of Instruction, New Jersey: Lorene erlbaum.

Safz, M,J (1996) From Action Research to the Classroom Case-study: the history of ANTEC.

Singh, K, and Shifflette, L, (1996). Teachers' Perspectives on Professional Development, Journal of Personnel Evaluation in Education, 10: 145 - 160.

Vars, J (1991) Integrated Curriculum in Historical Perspective. Educational Leadership, 49 (2): 14 - 15

Walker, D (1995) Integrative Education, Eric Digest 101

Williams V. (1983) Teaching for the Two Sided Mind, New York: Simon and Schuster.

MANAGING CHANGE - A SCHOOL TECHNOLOGY INITIATIVE

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School' s background

The institution which is the subject of this paper is Bluecoat Church of England Comprehensive School - an inner city school in Nottingham, U. K. Founded as a charity in 1707 "to Train up Poor Children in the Knowledge of God and Religion" the school from its outset sought "to provide a useful and practical education based on the Holy Scripture" which prepared pupils for employment in service or in apprenticeships with local lace and textile manufacturing firms of the time. Reading and writing were the main diet of the day with some arithmetic for boys and sewing for the girls.

Curriculum inertia

For nearly two centuries pupils pursued a very restricted course of study and the school concentrated unashamedly on character building, a practice which undoubtedly enhanced the employment prospects of the school leavers. The few early modifications that were made to the limited curriculum were idiosyncratic to the Headmasters in charge (ea. the early introduction of Singing and Nature Study by Thomas Cockayne, appointed Headmaster in 1825) Later, there were token acknowledgements to general trends in public education that followed government legislation and intervention in the second half of the nineteenth century. (Drawing, but no science, was the sole subject selected by Headmaster Curtin in 1880 from the array of 'modern' subject fostered by government examinations run by their Science and Art Department, formed in 1853) But perhaps it was the twentieth century development of public school examinations that proved the most irresistible force for change. Would-be employers swiftly came to require hard evidence of scholastic success as well as good character and various accredited commercial syllabuses were tried and adopted by the school in the 1930s. From 1940, in response to financial crisis, Bluecoat functioned as a one form entry Independent Grammar School with a selected intake of fee-paying pupils. These were prepared, through restricted academic school certificate syllabuses, for possible entry to the professions - a long cry from the Founders' expectations' The charitable function of the school was limited to the award of scholarships to poor church families.

Pupil/ programme mismatch

Economic circumstances eventually forced the school to accept public money and, in 1967, it became part of Nottingham's system of secondary schools. Admissions increased threefold and it is true this made possible the provision of a wider (but still 'Grammar School') curriculum. Links with the Church of England were assured through the retention of a majority of Foundation nominees on the Governing Body. (The school continues to enjoy Voluntary Aided status). But a serious challenge to the school staff came in 1978 when, under government's reorganization plans, the local authority redesignated Bluecoat as a mixed comprehensive school for 11-16 year olds, only later to develop a small VIth Form. The old 'Grammar School' syllabuses were to prove unsuitable to many of the new 'comprehensive' pupil intake, a third of whom arrived from a nearby inner city primary school and the rest through parental choice and local churches' recommendation No longer were pupils selected by ability. There was a demonstrable need for the staff to adapt to the changing clientele Unfortunately, there was no real dynamic for change. Some of the 'Grammar School' pupils continued up the school, the same staff remained in post and the school buildings and resources supported continuation of the old teaching content and process.

Time for change

The school received praise throughout this difficult period for its caring, Christian ethos but growing pupil resistance to learning, a pattern of early leaving, parental questioning, and marked changes in the area's employment patterns combined to set a climate of deep dissatisfaction.

A way ahead - the government Technology Colleges Initiative

The arrival of a new young Headteacher was critical. He grasped, quickly and clearly, the need for a basic revision of the school's teaching programme. In particular, all pupils needed to experience the use of computers in a variety of curriculum contexts; science and mathematics teaching would clearly benefit from liaison with local industry; old craft classes must give way to the study of design, materials and manufacture in the modern industries around us, and, for many senior pupils, cross-curricular work-related programmes seemed the appropriate provision. Without a sizeable injection of cash the desirable changes would be difficult and slow, and the Head persuaded Governors that it was well worth applying for inclusion in the government's Technology Colleges Initiative which could fund the very curriculum developments the school required.

The Headteacher was, in fact, seeking a massive shift of thought and practice in the school and, if the bid for money were successful, he would be engaged in a fascinating exercise of managing this change.

Staff accept need for action

After the decision to make application had been agreed by the Governors, there was a preliminary need to acquire the general acceptance by staff that changes were necessary and that the suggested bid for government grant furnished a possible way forward It did not prove too difficult to gain general agreement 'to do something about an unsatisfactory situation' for the reasons hinted at above. Further, the generous terms of a possible TI grant attracted universal staff consent to making application. They were aware that a capital grant of SP 100,000, in the event of a successful bid, would be available in the first year of the Initiative as would a grant of SP 60 per pupil Further, in the three subsequent years there was a possibility of SP 100 per pupil dependent on satisfactory progress towards approved performance targets.

School Development Plan

Next came the arduous but critical task of drawing up an application in terms of the school' s genuine ambitions.

Preliminary staff discussions, especially among the Senior Management Team, identified the strengths and shortcomings of the present teaching programme for the Bluecoat pupils and marked out areas for desirable change and improvement. Especial emphasis was put on the wider use of Information Technology, about which the classroom staff knew little but were seriously concerned. I t was a problem area picked out for urgent attention by recently visiting inspectors The following agreed list of school objectives was drawn up for incorporation in the School Development Plan to be submitted as part of the grant application.

1. to enhance teaching and learning in science, technology and mathematics;
2. to develop the use of information technology across the whole curriculum;
3. to enhance the vocational, work-related and international dimension to the whole school curriculum;
4. to create partnerships with business and industry in the management organization and curriculum of the school;
5. to promote increased educational achievement and the involvement of parents through enhanced assessment, target setting, guidance and career education supported by technology.

True to say, the serious likelihood of an imminent shakeup was not fully comprehended by most classroom staff at this stage.

Drafting the application for grant

Outside indicators suggested that considerable gain might accrue from an early application for grant The Governors could see this as an immediate way forward for the school whose scarce and diminishing resources were not conducive to the progressive change they sought. At this point, the Head's motivation and clarity of purpose energized the next big leap- forward. He deputed his Senior Management Team to discuss the Technology Colleges Initiative with individual Faculties to clarify its meaning for them in hard practical classroom terms. This focused attention immediately and seriously on curriculum shortcomings and remediation Faculty members were in fact required to translate acceptable Technology Colleges Initiative objectives into time-phased Faculty practice plans. This was a demanding and time taking exercise for the staff involved.

It was greatly to the credit of the Head and school staff that they were not deflected from the common aim by the enormity of the task they had before them. Without exception, they committed themselves wholeheartedly to this phase of the task. As a result of their endeavours, and to the many out-of-school hours spent by the senior editing team, a thoroughly professional bid was compiled and sent to the appropriate government department by the required date For each objective, the school outlined targets to be reached, action to be taken, time phasing, personnel involvement, resourcing and evaluation. An example of an action plan for 'Objective 2'(To develop the use of Information Technology across the curriculum) is given in the Appendix to this paper.

Staff ownership of Development Plan

The realities of the change of curriculum direction bad now been truly registered at least by middle management - largely Faculty Heads. The bid compilation may have left a measure fatigue and a desire for a pause in procedures, but there is no doubt that the exercise had led to ownership by most staff of the goals set out in the School Development Plan. Those staff who had previously given but passing acquiescence were now both more understanding of and even hopeful for clearly directed change, So far so very good.

Application granted - excitement and uncertainty

It is not surprising after all the concentrated effort that, when the good news arrived in early May confirming the school - among only 39 in the country - had been successful in its bid, there was rejoicing and excitement in the staffroom. This was, however, followed by discernible signs of anxiety and the handling of this phase of the exercise needed considerable management skills on the part of the Head and his team. Attention had to be paid to a lack of security which had begun to surface amongst some staff as the changes crept nearer. A number of older members (including the exe' Grammar School' teachers) enquired about early retirement and one or two stress related absences were registered later in the term.

Calm transition

A period of calm and reassurance became imperative. It was made clear that programmes would not be changed for the year 1996-7 but would go ahead as agreed and advertised. Further, Governors studied the Development Plan and, with new funding in mind, sanctioned those affordable items of resource of immediate assistance to teaching staff so encouraging them in their current work schedules (Details of recent ancillary staff appointments are given below). The all-important moves towards a revised curriculum, while not forgotten, received no emphasis in the day to day management of the school at this stage. By such measures, staff buoyancy has been sustained.

Background preparation for the curriculum change

a. Building

While classroom teachers conscientiously pursued their routine teaching and pastoral roles, considerable preparatory work was undertaken by senior management. Firstly, architectural advice was sought and tenders invited for the construction of two new science laboratories. This provision was long overdue and the need had been highlighted in the recent inspectors' report. It is important to record here that all staff recognized this structural development as the proper use of the initial SP 100, 000 grant, which, in the provisions of the Technology Colleges Initiative, is earmarked for 'building work immediately necessary for the delivery of an adequate science and technology programme'. Some disruption of teaching areas is anticipated but the planned relocation of classes and restriction of noisy building procedures to vacations should minimise interruption of the main school timetable.

b . Ancillary staff

A first year grant, related to student numbers, has allowed new key appointments to be made. Terms of the Initiative envisaged these would not only enhance teaching power in the critical areas of the curriculum but would give support and timetable release for curriculum planning and also for staff f training. A Systems Manager is newly appointed to instal and service a sizeable Computer network and to train and support staff specifically with work in Information Technology. A Library Assistant and a Visual Aids Technician are now in post with the tasks of developing and facilitating efficient use of all school resources including library, reprographics and audio-visual equipment and materials. Any practicing teacher will immediately realise that these new appointments are particularly popular additions to the staff complement. Indeed, there is no doubt that half way through term one of year one of the Initiative, spirits are still riding high in the Bluecoat community.

c. Project Managers

The third area of preparatory work has been the identification and designation of key Project Managers to guide, oversee and monitor those planned curriculum changes scheduled to come on stream in the next academic year Allocation of tasks has proved easier than was feared for, while the changes involve exploration of new ground for some staff, so too have there been early individual initiatives which can now be encouraged and resourced to bring about effective, extensive and ongoing practice. For the most part, therefore, the Project Managers have identified themselves and comprise a team of real enthusiasts. It must be admitted that the possibility of rewarding the Project Managers with timetable release and responsibility awards from the new money has secured professional are already recognition for each individual concerned. Staff, therefore, designated to oversee the following developmental areas expansion of Science and Mathematics, use of Information Technology throughout the curriculum, links with industry and commerce, careers development, enhancement of general standards of achievement and increasing international aspects of teaching programmes.

One key post is yet to be filled, however, and that is the all-important Head of the Technology Faculty. Unfortunately, the teacher recently prepared to bring forward this part of the curriculum has left the locality and a new school appointment is imminent. When this is made, the full complement of Project Managers should be in place and they will be given timetable time to draft action plans for their specific areas of development. In this way, frameworks for discussion and progress will be available in the quieter post-examination period when staff will be more free to fill out their individual teaching programes for 1997-8. Faculty heads can then, within the roughly prescribed budgets, list time. and resource requirements and any staff training needed to implement their new programmes efficiently.

d. Senior Management Team

Neither the Governors nor school management can totally predict how successful will be the implementation of these courses in prospect but, with good will and adequate staff development, we believe that pupils entering the school in a year or two will receive a much updated education which is more appropriate to the times and locality in which they live. Certainly, the facilities and resources will be much improved but there will always be need for Constant monitoring and revision of the curriculum. We are seeking to build a management structure that makes this continuous review process a natural part of school life. The effectiveness of the Senior Management Team is critical here and Governors have agreed, in consultation with the Head, to nominate an augmented Team which will carry forward the Initiative in its next stages. This group of senior staff are to receive suitable responsibility awards related to their enhanced role.

e. Sponsor Governors

There is a condition of acceptance of the Technology Colleges Initiative grant that the school, having obtained sponsorship money to match an initial capital grant, shall appoint 'Sponsor Governors' on to its Board of Governors. This we are happy to do. Indeed, the need for more business and technological expertise on the Board has been recognized for some time. The school must also honor its foundation deeds by keeping a majority of Foundation Members on the Board and therefore revised *Articles of* Government are under scrutiny by both Diocese and the Department for Education and Employment with a view to satisfying all interested parties.

CONCLUSION

There is no doubt that the current Technology Colleges Initiative presents the school community with a great opportunity to deliver, in contemporary terms, that 'useful and practical' education proposed by the Founders nearly 300 years ago. Bluecoat has undergone many changes in its long history and has adapted with varying degrees of success to the economic and social environments in which it has operated.

It is indeed exciting to be present at this stage of its evolution and to observe how smoothly, painlessly and efficiently this complex organization can mutate under the guidance of thoughtful and skillful management

It has been important to introduce change as gradually as government time constraints will permit. Hence classroom practitioners have been content that their current teaching plans would not be abruptly altered by the adopting the Initiative in the middle of this academic year. The winds of change and rumor can, however, be disturbing even to the most smoothly running school routine. Nevertheless, I believe that familiarity with their own School Development Plan, its timed phasing and probability of generous government grant for the next three years will keep staff anxieties to a minimum.

Meanwhile, meticulous planning of new more appropriate teaching frameworks and resources should ensure that the next crucial phase of curriculum change is fully prepared, universally understood and, as far as human activity can be' trouble fre

The Nottingham Bluecoat school Technology college development plan Action plan		
Technology College Aim		
2. Develop the use of information technology across the Curriculum		
Objective		
(i) To enhance teaching and learning through increased use of I.T. across the curriculum		
Performance Criteria		
	Performance Target	Date
1. increased the use of I.T. in all areas measured by the proportion of lessons in which I.T. is used directly within schemes of work	1. proportion of lessons : 5% 10% 15% 40%	9/96 9/97 9/98 9/99
2. increased casual use of I.T. for private study, assignments and homework measured by proportion of students using and amount of time	2:1 proportion of students 10% 30% 60% 100% 2:2 Average time peer work 1 hour 2 hours 3 hours 5 hours	9/96 9/97 9/98 9/99 9/96 9/97 9/98 9/99
3. increased staff development in I.T. as measured by the proportion of school staff trained in I.T. and applications for curriculum purposes and evaluation of effectiveness.	3. proportion of staff trained and confident in relevant I.T. applications for curriculum use 30 40 60 100	9/96 9/97 9/98 9/99
4. Number of students achieving accreditation in IT capability at end of KS4 and 16-19 (GCSE short course/GNVQ Module/RSA)	4. proportion of students 33% 100%	9/95 9/98

615

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Target	Action	Person(s) Responsibilities	timing	Evaluation
	1. Staff Development Systematic program of staff development targeted on all curriculum areas in appropriate software applications of a general and subject specific nature. Phased programme according to plan. Priority given to Technological subjects and staff teaching vocational courses.	Deputy Head - Personnel Head of I.T.	4/95 onwards	Monitoring and evaluation will be undertaken by Governors Curriculum Committee, School Curriculum Committee and Technology College Management Group.
	2. Increase Curriculum Support for Teachers (i) Consultancy and classroom support from I.T. specialist teacher in curriculum planning, resourcing and delivery	Headteacher I.T. Staff	9/96	Recording usage of I.T., classroom observation, review of schemes of and qualitative evaluation will be central.
	3. Appoint Systems Manager Additional technician support needed to release teacher time for curriculum support.	Headteacher Head of I.T.	5/96	Termly progress checks and annual written reports accompanied by revision to I.T. Development Plan.
	4. Revise I.T. Curriculum Development Plan for Technology College Status Although a curriculum development plan is in place, supported by an equipment enhancement programme, we wish to develop I.T. capability beyond that of the National Curriculum. Further revision of the plan is necessary to re-define entitlement and implement across the curriculum.			
	5. Use of Portable Computers We wish to develop a pilot project in Science to explore the use of portables (palm tops and notebooks) in specific applications and study skills in general eg. Data logging; word processing; personal organisation. Later replication in other curriculum areas.	Heads of Science and I.T.		
	6. Multi-Media and Internet The site wide network will have full multi-media and Internet capability. This will be used to support flexible and independent learning as well as international dimensions to the curriculum.	Deputy Head-Curriculum Head of I.T. Head of Faculty	9/96	

616

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Target	Staff Development	Finance and Resource Implications	Source of Finance
Objective 2:1	(i) Systems Manager and Technicians Management use and maintenance of system	Equipment and Resources Estimated cost	
		1. Network for site £20,000 96/97	Capital Bid/Sponsorship/School Budget/Appeal
		2. Sixth form I.T. Center £26,000 96/97	
		3. GNVQ Centre £32,000 96/97	"
		4. Sixth form learning Center £15,000 96/97	"
		5. Co-operative Bank Project £5,000 96/97	"
		6. Lower school library Network £20,000 96/97	"
		7.upgrade Computer Room 1 £35,000 96/97	"
		Staff development	
		1996/97 £1,000	TCAG
		1997/98 £1,00	TCAG
		Maintenance and Repairs	
		1996/97 £2,000	TCAG
		1997/98 £1,000	TCAG
		1998/99 £3,000	TCAG

617

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The Nottingham Bluecoat school Technology college development plan Action plan			
Technology College Aim			
2. Develop the use of information technology across the Curriculum			
Objective			
(ii) To extend provision of I.T. Equipment and Facilities Throughout the School			
Performance Criteria	**Performance Target**		**Date**
1. Number of computers available for curriculum use in Dedicated I.T. Rooms-usually workstations on the school wide network.	**1. Number:**	60	9/96
		90	9/97
		120	9/98
2. Number of computers available for use by students in curriculum areas – usually workstations or portables	2. Number	10	9/96
		40	9/97
		60	9/98
3. Number of computers available for casual use in Library and Resource areas.	3. Number	6	9/96
		30	9/97
		40	9/98

618

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Target	Action	Person(s) Responsibilities	timing	Evaluation
	1. Establish Site Wide Network Install "fibre-optic spine" for which "network limbs" can be created in all buildings with appropriate hardware, software and peripherals. Industry standards will be applied throughout. Multimedia capability and internet facility available.	Headteacher School Bursar Head of I.T. Systems Manager	1/97	(i) The development plan for I.T. and its implementation will be monitored by the Technology College Management Group and the SMT, responsible to the Governors Development Committee.
	2. Create Sixth From I.T. Center 24 Workstations Network with appropriate peripherals.		1/97	(ii) There will be regular progress checks: (termly) and annual written review of the Development plan and subsequent revision.
	3. Create 16-19 GNVQ Center Network and Related Equipment. 28 Workstations Network with appropriate peripherals.		1/97	We are being supported in the planning and development process by Nottingham Trent University and GTI Ltd. These external bodies will contribute to the evaluation process.
	4. Create Sixth From Learning Resource Center Network 14 Workstations and peripherals.		1/97	
	5. Network Co-operative Bank Area 3 Workstations and peripherals.		9/96	
	6. Network Lower School Library/Learning Resource Centre 18 Workstations and peripherals		9/96	
	7. Upgrade Existing Computer Room 1 Network		9/96	
	7. Provide Portable Computers for use in Curriculum Areas. (i) Technological Subjects –28 computers (ii) Other Subjects - 32 computers	As above	9/98 9/99	As above

619

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Target	Staff Development	Finance and Resource Implications			Source of Finance
Objective 2:2	1. Use of Information Technology Training in software applications and general use of hardware for all staff.	**Teaching Staff**			
		Curriculum support: 0.5 FTE	1996-97	f10,000	TCAG
			1997-98	f10,000	TCAG
			1998-99	f 10,000	TCAG
		Technician			
		Systems Manager	1996-97	f14,000	School Budget
			1997-98	f14,000	School Budget
			1998-99	f14,000	School Budget
		Staff development			
		Approximately 2 days per staff		f10,000	TCAG
		Materials and Equipment Materials to support planning and management, plus systems management.			
		1996-97 f500			TCAG
		1997-98 f500			TCAG
		1998-99 f500			TCAG

620

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PRACTICE TEACHING IN TEACHER EDUCATION

Egidio F . Schmitz.[1]
Brazil

INTRODUCTION

There are many comments made about the poor quality of teaching, as well as the deficient preparation of teachers. In our research about "practice teaching in teacher education: Reality, problems! alternatives' we tried to obtain some significant data in order to propose valid alternatives.

Theoretical Foundation

Man is the only living being able to be educated. *But,* man is a concrete being, in a well defined situation. Besides his family, it is the school, and, In this, the teacher that provide him with education. Therefore, he must be well prepared in order to offer good education. Ortega y Gasset (1962) asserts that man is himself and his circumstances. To the circumstances there belongs his family, the community, the school and all the people that in a way participate in his life. One of these people is the teacher.

However, as all human beings, the teacher is not wholly free, living in a process of liberation (Schmitz, 1984, chap. 1). He is unable to liberate himself, depending on other people for his full liberation (Freire, 1987). Education itself, although it can help to liberate man, is not liberation itself. It is a process through which, cooperating among them, men help each other to liberate themselves, and to integrate freely and creatively in society (Schmitz, 1993).

According to Gehlen and Silva, education has an a basis the concept of man-world, helping dominated men to seek their liberation (1986:48). According to Demo (1980:14), "besides knowledge and values dominating in society, [education] must transmit the conscience of the rights and the duties of political citizenship" Education, in this sense, is a political aspect, because it prepares people to live and realize themselves in society And the teacher is called upon to be a mediator in this process of education Cooperation is one of the main objectives of education, for, according to Freire, "nobody teaches anybody", but all learn together and from one another.

Pacheco and Barriga (1988) find it difficult to define education, and thus to teach teachers how to proceed in order to offer real education.

Education, as a process of learning, implies a change in the ways of perceiving, thinking, judging, being and acting (Schmitz, 1993) "Education should think more of learning than of teaching, because the illiterate of tomorrow will not be the person who does not know how to read, but it will be the person who does not know how to learnt, (Koche. 1975:11) In order to really learn, it is necessary to develop a critical spirit, which cannot be donated, nor arises spontaneously Both, educators and educated together create conditions for i t (Brandao, 1985:45).

Teacher preparation is made through the curriculum. But , besides the visible curriculum, there is also the hidden curriculum, which comprises, at least, the following learnings: learning to be, learning to make oneself, learning to create, learning to learn, learning to understand, learning to adapt, learning to live together, learning to discover transcendence, learning to think (Borrero, 1991-1992 Schmitz, 1994) The curriculum can not be a plain sequence of things to be learned, but it has to consider aspects that cannot be measured or even evaluated, and that, nevertheless, are necessary for everyday life. The school, however, where most of this learning is carried out, does not exist without society and the community. Without the participation of the community, education will be very difficult and deficient, if not impossible. And, as a member of society, the teacher is a representative of the community values.

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The Fundamental Law of Education of Brazil says in its first article: "Teaching in primary and secondary school has as objectives to offer the pupils the formation necessary for the development of his(her) potentialities, an element of self-realization, preparation for labor and preparation for the consciencious exercise of citizenship" (in Boynard and others, 1972:30).

There are some elements that can not be programmed, such as the development of the potencitalicies, and the consciencious exercise of citizenship. They belong *to* the hidden curriculum, but, nevertheless, they must be, in *a way,* exercised, in order to develop. And, it is the teacher who has to give the youngsters the opportunity for doing so.

However, in order to be able to do this, the teacher must be well prepared. People have to pass from the common sense to the philosophic conscience (Saviani, 1980): This requires the teacher to help the students or the pupils to exercise dialectics, confronting existing reality with the desired values. This is only possible in a democratic setting' where everybody is responsible for everything that is decided, and takes part in the elaboration of the curriculum and in the practice of this curriculum, This is citizenship, according to Demo (1991:17), through which "society acquires, progressively, conditions of turning itself into a historical subject, consciencious and organized, with the capacity of conceiving and carrying out his own project".

In this endeavor, the person as helped by education, which is "something different from an end in itself It is that through which one acquires concrete objectives, directed towards determining new routes in the order of social progress" (Romero, 1991:48) However, personality is constituted by multiple inter-relations, with other people, with their family, with the community, with society, thus structuring each one his(her) own personality. (Schmitz, 1993). But, one of the most important inter-relations is that of the teacher with his pupils, helping them to find ways of structuring their own personality.

However, is he being prepared for this task? Does his education envisage full participation of everybody in the construction of democracy? Vivanco and Moragues define democracy as "the capacity and faculty of the human groups t o determine, in an autonomous and independent way, their own social project, deciding about their ways of objectives)' (1992:28).

There is a danger of centrating the activities in one person, be it the teacher or the student. It should be centered on the situation, which comprises the teacher' the student, the subject matters, the school, the family, the community, and so on, in order to give the student a real chance to integrate is learning. As we found out in one of our researches, this is not being done in practice teaching (Schmitz, 1990) Teaching, according to Della Torre, "is a philosophy, a science and a technique, inspired by the feeling that gives art its power of communication and communion (Anisio Teixeira, cited in the Parecer 349/72, of the Federal Council of Education" (1983 : 1) . The future teacher has to take part in all the planning, the execution and evaluation *of his* activities Practice teaching, in many cases, uses to be a kind of appendix to the theoretical activities, being carried out at the end of their course (Schmitz, 1990).

One of the worse things that happen to people, especially teachers, is the lack of own values, for, in the words of Bruner: "are we producing thinkers scientists, poets, legislators, in sufficient number to satisfy the solicitations of our times?" (1976:8).

It is good to remember that both, the school and the teacher serve a larger community c,, than the small world in which they act. Democracy and, consequently, cooperation are carried out by and between different persons, with their own values, that have to be respected and lived by In the words of Mialaret, "a future teacher must know the environment which his students come from, their previous experiences and school cycle, which will be or can be their next cycle All of this can be done due to the teachings of the preparation course, accompanied by practical work and visits to teaching institutions. (1981:107). Besides the contents of teaching, there is a need for the consideration of the circumstances in which teaching is being done, especially practice teaching as a training for the future teacher. There is still a lot of conservatism in education, whicis more preoccupied with contents than with people.

According to Favero, it is not only taking an undergraduate course that an individual becomes a professional, but compromising himself as a constructor of a practice. Starting from his practice, he has to construct a theory, which, identifying with decisive elements of practice, accelerates the processes (in: Alves (org.), 1995:65). Really, usually the results of practice are not being much used for analysing, evaluating and remaking the theories, as well as the curriculum. There is a lack of a critical vision of the situation

There is a need for caking conscience, transforming the school into a space for living and living together, which transforms the teacher into a creative being, because he participates in his own regeneration (Sawaya, 1981:75). The same is said by Paulo Freire (1980), when he speaks of conscientization, which has to refer to the whole situation including his family, his community, as well as social, communication, political and cultural aspects

According to Piconez, "the nearness to reality turned possible by practice teaching and the *practice of reflection* about this reality, has been done in solidarity which propagates itself to the other curricular components"' (1994:25). *As* a mother difficulty, Oliveira *puts* that "the subject matters, in their turn, were *juxtaposed, in a* sequence of "non-related' contents and activities, which, *at* the end of the course would result in the formation of a future teacher with a immobile knowledge, because the student was not offered a global visualization of the process of teaching" (1994:215). Unfortunately, there is no or little integration between the schools and the community, and the students do not experience the whole of life experience they should have in order to learn how to cope with the real situations they will meet in their professional activities as teachers and educators. There is an urgent need for integration between all people and institutions involved in education, planning, carrying out evaluating and remaking their activities, and, especially, assessing their values, in order to offer the community and the children a better education.

According to Boneti, "the teachers can exert a SIGNIFICANT influence in the formation of the self-concept of the child through the kind of environment of learning they establish in the classroom and the personal attitudes in relation to those children" (in: Contexto e Educacdo, n 5, p. 62), However, before he cries co influence the children, the teacher himself needs to have a selconcept and self-esteem, which is never concluded, but is being built through the whole life of the person.

According co Schmitz, "one of the major tasks [of the teacher] is to help to create a climate of collaboration, integration and corresponsibility He has also a task of selecting and organizing experiences through which the children and adolescents can learn better and more profoundly' (1993:37) This applies both to the teacher working with children and to the teacher who is educating new teachers. It applies in a special way to practice teaching, where the student has an excellent opportunity for learning how to proceed with children, and to review his theories in practice especially if he evaluates, together with his teachers, all the experiences made by him. Practice teaching can be one of the prime moments of teacher education, integrating theory and practice into one great moment of learning.

But the teachers who educate future teachers should be aware that much of the success of the future teachers will depend on their capacity of interpreting reality and adapting their actions to this reality. In order to obtain this they need a well developed sense of reality, a critical mind and creativeness, seeking, all the time, new values or creating occasions for applying these values. Proceeding in this way, the teacher educators will give a precious contribution to the ammelioration of education in their country, and to personal, educational integration, through the citizens. social, cultural, political and educational integration, through the citizens.

Data Analysis

In the following, we give a synthesis of the main data obtained by the research about practice teaching in the preparation of teachers for basic education Reality, problems, alternatives" We remind that the data are not yet definite, although sure, and almost finished, giving us a good perspective of the tendencies of the persons surveyed. we stress that there were consulted practice teaching supervisors, students with previous teaching experience, students without this experience, and classroom teachers of the classes where practice teaching has been carried out, This research has been made in eight universities and different secondary schools of Greater Porto Alegre and surroundings. We obtained answers from 158 respondents, although many more have been consulted However , because of different difficulties we obtained these data indicated, which are sufficient for our objective. we made individual interviews, as well as applied questionnaires *with both,* closed and open questions, each kind of questionnaire specific for the four different kinds of respondents.

As to the need for practice teaching, there was a consent that it is a '"practical moment of learning", and that " it integrates theory and Practice" AS for the causes of dropping of the courses of teacher education, there was a coincidence in indicating as the main reasons, "the lack of motivation "financial difficulties', and the "lack of Incentives" with equally high percentages. The teachers of the schools where practice teaching is being carried out stressed "low salaries" as a very great problem.

As to the best period for carrying out practice teaching, the majority asserted it would be "from the middle of the course", contrary to current practice, in diverse cases, where it is being made during the few last semesters of the course. As for the kind of practice teaching, the majority of the students with previous teaching experience answered that "there should be a different kind of teaching practice" for the ones that had had this experience. In reference to the time tables and shifts in which practice occurs, it is during the normal school years and times. In relation to the duration of practie teaching, the majority think it satisfactory, although students with prior experience judge it it unsatisfacotry (46.67)%. As to the task of the practitioners in the schools, the classroom teacher informs that they help (54.55%), whereas the supervisors of the practice affirm tha the practitioners substitute partially the teacher (43.48%). The practitioners themseleves say they substitute the classroom teacher (58.14%).

As to the location where to carry out the practice, both the supervisors and the classroom teachers coincide that it should be taken out either in the community of the university (41.18%), or in the community of the practitioner (23.52%). In reality, the practice usually happens in the region of the university (47.83%), in a place chosen by the practitioner him (her) self (82.07%). In reference to the ties of the university with the practice schools it occurs through a letter of presentation (53.45%), not existing, therefore, a special tie of the university with the practice school.

Referring to the perfectioning of the teaching methods of the teacher, there are indicated different kinds: through special courses, readings, seminars. The contribution of the practitioner consists in: helping in the reformulation of practice teaching and the curriculum, solifiying the ties with the practice institutions. But, 23.42% of the students say they are not being used. No participation at all.

As to the way the practitioners are viewed, there are divergent informations. The supervisors say they are professionals of great value (47.83%); the classroom teachers assert they bring valuable knowledge and new experiences (66.67%); the students judge the others (both supervisors and classrooms teachers) see them as professionals of great value (33.33%), as strangelements at the school (23.76%), not very well prepared (18.26%). In the feelings of the supervisors and classrooms teachers positive feelings dominate. In other words, not all students do feel at ease in face of the teachers and supervisors.

In reference to who elaborates the curriculum of practice teaching, the supervisors say it is the coordination of the course (36%), the practice students together with the supervisors (36%), or the classroom teachers (20%) The classroom teachers say it is the classroom teacher together with the supervisor (45.45%). The students say it is the classroom teacher together with the students (31.09%), or the student together with the supervisor (27.73%). Therefore, there appears to be great diversity of opinion in this case. What is the reality? Anyway, there appears not to be much of integration between the different participants of practice teaching.

As to the reasons why the students chose teacher education courses, the data are the following: According to the answers of the student teachers without previous teaching experience, they are: personal liking (19 . 34%), because they like to teach (15 74%), to modify the milieu in which they live (1. 3.17%). The students with previous teaching experience gave the following answers: personal liking (22.72%), to modify the milieu in which they live (17.86%), because they like to teach (15.48%)

Therefore, there seems to be coincidence between the answers of both kinds of student teachers, although the percentages of each option are relatively low. The classroom teachers assert that the reasons for the choosing of teaching are: liking of teaching (25%), to educate critical citizens (21.43%) [which did not appear in the answers of the students], because they feel themselves able to do so (17.86%) Therefore, there is only coincidence in the liking of teaching What are the reasons?

As to the difficulties in practice teaching

The following are indicated: The practice supervisors indicate : lack of support from the university (30.77%) [they don't feel enough understanding for their job], distance from the location of the practice (25.64%). [at times they have to travel long distances to visit the practitioners], insufficient salaries for the supervision (17.95%) [some of c hem don't receive a special payment for visiting the student teachers], lack of integration between the university and the school community (12.82%). The classroom teachers say there is a lack of ties between the universities and the community (33.33%), and 26 77%, don't see any problem.

The students see the following difficulties: lack of material resources (18.64%), no payment for practice teaching (12.99%), the school does not stimulate new experiences

(11 86%), they feel the whole depends only on themselves (10 63%), they see no difficulties (11.30%).

In reference to the accompaniment of the practice teaching, the main answers were The supervisors affirm that it is carried out through visits to the locations [students] of practice teaching (34.92%) through the final report (34 92%), through debates at the university, with the students (30.92%) The student teachers assert it is made through the visit of the supervisors (27.38%), through the final report (27.38%), through seminars (12.30%). There appears to be coincidence between the students and the supervisors.

Who follows and evaluates practice teaching: According to the supervisors, it is the supervisor (56.25%), the classroom teacher (25,00%), the administration of the school, together with the supervisor (15.63%) The students inform that evaluation is made: by the supervisor (47 *66%) , by the* classroom teacher (28.13%). There seems to be a big problem: the students don't take part, at least not in a significant way, in the evaluation of their own teaching.

How is practice teaching being viewed? By the supervisors: as preparation for reality (42.55%), as a tie between theory and practice (42.55%). By the classroom teachers: as preparation for reality (36.55%), as a tie between theory and practice (40,00%).

Who organizes practice teaching According to the supervisors: the practitioners, together with the school and the supervisor (50.00%), the supervisor, together with the student (40.00%). According to the students, the supervisors together with the students (54.94%), the student, together with the school and the supervisor (21.51%), the student all by himself (9,68%) [This information should be reflected seriously on]. There have been a good number of answers that indicate a kind of integration between the students, the supervisors and the schools.

About the validity of practice teaching being carried out in a non-scholar institution, most of the respondents agree on it (79.52%). As to the relationship of the student teacher with the classroom teacher, the answers of the students are: the majority answered they receive help from the classroom teacher, but 31,18% of the students assert they don't receive that help.

The question about who is responsible for the elaboration of the curricula of teacher education courses, presents: For the supervisors: the teachers (professors), the students and the coordinators of the courses (29.03%), the Council of the Center responsible for the teaching unit, which, usually approves all activities of the college) (16.13%). The students, in majority, answered they ignore how it is being done (35,61%), they believe it is the coordinators of the courses (25,00%), the coordination (13.39%). It is tragical that the students don't take part in the making of be prepared to be good AS to the best location for the answers were: For the student (30 43%), (21 74%). The students their origin (38.71%), college (16 13%),The students, in their. It is tragical that the students don't their own curriculum, by which they should teachers. for the carrying out of practice teaching, the supervisors: a school in the region of at a school of the university itself consider it should be: in the region of in the region of the university (15 05%), at a school of the university by itself (11.83%),

CONCLUSION

we make a short conclusion All the people involved in practice teaching think it: is very important, although the conditions in which it should occur and the way it should be done are divergent. There is a pretty close relationship between the answers of the supervisors and the classroom teachers, as well as between the students with and without previous teaching experience. There is 16 also accord as to the question whether practice *teaching* should be carried out starting from the middle of the course, in order to give all the entities involved: supervisors, students, classroom teachers, community and the university, the opportunity of analyzing, evaluating and remaking practice teaching, There is also a need for more Integration between the different people and institutions involved in practice teaching. The curriculum of teacher formation courses should be planned by all people interested in teaching.

we also expect greater participation of the student teachers in the organization and evaluation of practice teaching, as well as in the formulation or reformulation of the curricula, The same way we point out the need for the integration between all elements involved in the practice, be it *in* its prepration or *planning*, be it *in* the execution, evaluation and reformulation of practice.

It is also necessary that all teachers (professors) of the courses of teacher education take part actively not only in the formulation of the curricula, but also in the configuration and organization of practice teaching, because the students have to apply the knowledge acquired, or to be acquired during the courses, which, very often, does not correspond to what is expected of the teacher of primary and secondary education.

Finally, there is a need for the whole local community, schools, the administration of the schools, the teachers, pupils and the parents to be involved in the preparation of and well educated teachers and educators, so that they may be to take part, with the community, *in* the education of children, offering them a truely liberating education,

References

ALVES, Nilda (org.3 Formacao de professors [Teacher education. Thinking and doing]. 3. ed. Sao Paulo: Cortez, 1995.

BOYNARD, Aluisio et al. A reforma do ensino. reform]. 2. ed. Sao Paulo: LI, 1972,

BRANDAO, Carlos et al. O educator: vida e morte. (The educator: life and death). 6. Ed. Rio de Janeiro: Greal, 1985.

DELLA TORRE, M B.L. Cadernos de orientacao dos estagios habilitacao especifica do 2° grau magisterio. [Bluebooks of orientation of practice teaching, specific habilitation in secondary education teaching] 2. ed. Sao Paulo: Queiroz, 1983

DEMO, Pedro. Cidadania menor. Algumas indicacoes quantitativas de nossa pobreza politica [Minor citizenship Some quantitative indications about our political poverty] Petropolis: Vozes, 1991,

FREIRE, Paulo Conscientizacao Teoria e pratica da libertacao Uma introducao ao pensamento de Paulo Freire, [Conscientation. Theory and practice of liberation An introduction to the thought of Paulo Freire]. Sao Paulo: Moraes, 1980,

FREIRE, Paulo. Educacao como pratica da liberdade (Education as the practice of liberty]. 18 ed. Sao Paulo: Paz e Terra, 1987 .

GEHLEN, Ivaldo & SILVA, Marta Arretche, O saber como instrumento politico e a funcao do agente em educacao [Knowledge as a political instrument and the task of the agent in education). Ijui: Editora UNIJUI, 1986.

KAYE, Barrington, Formacao de professores: Participacao na aprendizagem, um relatorio de experincias. (Teacher education: Participation in learning, a report of experiences). Lisboa: Horizonte, 1977.

MIALARET, Gaston. A formacao dos professores. (The formation of the teachers). Coimbra: Almedina, 1981.

OLIVEIRA, Ana Cristina B.D. Qual a sua formacao, professor? (What is your education, teacher?). Campinas: Papirus, 1994

ORTEGA Y GASSET, Jose. A meditacao da tecnica. Vicissitudes das ciencias. (The meditation of technique. Problems of the sciences). Rio de Janeiro: Livro Ibero-Americano, 1962.

Pacheco, Tereza & Barriga, Angel D. La Formacion De Professionales Para La Educacion. Elemntos Para Un Replanteamiento. (The Formation Of Professionals For Education. Elements For A Replanning). Mexico: Universidad Autonoma De Mexico, 1988.

Piconez, Stela C. Bertholo. A pratica de ensino e o estagio supervisionado: A aprozimacao da relidade escolar e a pratica da reflexao. (Practice teaching and supervised practice). 2. Ed. Campinas: Papirus, 1994. P. 15-38

ROMERO, Edgardo Cortes. Los Problemas estructurales de la educcacion. (The structural problems of education). Linea Sindical y Educativa para America Latina. Montevidio, n. 26,p. 48-49, set. 1991.

SASAKI, Robinson, Curso de magisterio; Uma fabrica sem controle de qualidade. (The course of teacher education: A factory without quality control). Nova Escola, Sao Paulo, n. 26, p. 12-22, nov. 1988.

SAVIANI, Dermeval. Educacao: Do senso comum a consciencia filosofica (Education from common sense to a philosophic conscience). Sao Paulo: Cortez/Autores Associados, 1981.

SAWAYA, Maria Amelia Pereira. O professor: uma pessao guardada e aguardada. (The teacher: A guarded and expected person). Petropolis: Vozes, 1981.

SCHEMITZ, Egidio F. Como ser livre num mundo de opressao (How to be free in a world of oppression). Porto Alerge: SAGRA, 1984.

SCHEMITZ, Egidio F. A . formacao do professor para as series iniciais do 1° grau. (Preparation of teachers for the initial grades of elementary education). Estudos Leopoldenses, Sao Leopoldo, v. 26, n. 120. P, 7-56, dez. 1990.

SCHMITZ, Egido F. Fundamentos da didatica. (Foundations of didactics). 7. Ed. Sao Leopoldo: Editora UNISINS, 1993.

SCHMITZ, Efidio F. Furriculo e aprendizagem (Curriculum and learning) Estudos Leopoldenses, v. 30, n. 138, p.7-14, jul./ago, 1994.

TEDESCO, Juan Carlos. El desafio educativo (The educational challenge). Buenos Aires: GEL, 1987.

VIVANCO, Susana de & MORAGUES, Mariana, Democracia en la escuela, tarea de maestros. (Democracy in the school, task for teachers). Linea Sindical y Educativa para America Latina). N. 12, p.28-31, Jul.1992

INSIGHTS DERIVED FROM PRE-SERVICE STUDENT TEACHERS' EVAULATION OF AN EARLY FIELD EXPERIENCE AND A SUPPORTED TEACHING PRACTICE PROGRAMME

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INTRODUCTION

Field experience has been regarded as indispensable to the development of teachers in the initial phase of teacher education. Teacher education institutions use a number of methods of evaluating the effectiveness of field experience programmes. This paper attempts to examine an Early Field Experience and a Supported Teaching Practice programme on the basis of student teachers' evaluation of such programmes. The evaluation is analyzed in the light of the context of the field experience programmes. Suggestions to improve practice are based on insights gained from the analysis.

The field experience component in the teacher education programme

The teacher education programme in the context of a newly established institute

The Hong Kong Institute of Education is the largest and only single-purpose teacher education institution in Hong Kong. It was established in 1994 with the amalgamation of the former Colleges of Education which were disestablished from the government. With the establishment of the Institute, a new Certificate in Education programme was implemented in 1994. The present research inquires into the effectiveness of the field experience component of the Certificate in Secondary Education programme.

The field experience component

The field experience component of the programme comprises four phases in a period of two years.

1. Early Field Experience.
2. Supported Teaching Practice.
3. Block Teaching Practice.
4. Additional school visits

These phases of field experience are squential and developmental and designed to provide opportunities for student teachers to experience a wide range of settings and pupils (Ribich, 1995). Such arrangements reflect a constructivist approach to teacher preparation, with emphasis on "the growth of the prospective teacher through experiences, reflection and self-examination" (McIntyre et al., 1996). The Early Field Experience and The Supported Teaching Practice, the scope of the present study, take place in student teachers' first year of study.

The Early Field Experience (EFE)

The Early Field Experience includes a two-day Primary School Attachment and a three-day Secondary School Attachment. It aims at letting student teachers get acquainted with the school environment, pupil characteristics and various aspects of teaching prior to the later Supported Teaching Practice.

The Supported Teaching Practice (STP)

The Supported Teaching Practice (STP) is the first period of student teaching which provides student teachers with the first experience of working in authentic settings. The hands-on experiences and professional encounters in the dual contexts of the STP, i.e. the school and the Institute, provide numerous opportunities for reflection and self-examination. Student teachers' professional encounters with their peers, Institute supervisors and school personnel generate multiple experiences that contribute to the construction of their personal theories of teaching. The STP is characterized by its three levels of support: a. support from the placement school; b. support from the Institute and c. support from /collaboration with peers.

Support from the school Various key personnel were defined to provide support to student teachers in the school context. The teaching practice liaison person makes the STP arrangements for the student teachers. He/She is also the contact point between the Institute and the school. The Supporting Teacher, usually of a certain subject area, holds periodic discussion with the student teacher about the latter's progress and engage in lesson observation activities with the student teacher.

Support from the Institute Subject Tutors of the two elective subjects of the Institute observed student teachers' lessons and held post-lesson reflective discussions with them.

Support from peers Student teachers from subject-based teams engaging in joint preparation of teaching, peer observation and post-lesson reflective discussion and collaboration in classroom teaching. At the operational level, some student teachers were paired up with other student teachers who taught the same two subjects. Some others had a partner in one subject only. There were also cases in which the student teacher was the only one student teacher teaching two of the subjects.

The dual contexts of implementing the EFE and STP

As the field experience takes place in the dual contexts of the teacher education institution and schools, its implementation depends very much on contextual factors. The EFE, though a common practice in other parts of the world, is a totally new arrangement to the Hong Kong school context. Before the establishment of the Institute, secondary schools were just providers of placement sites for teaching practice. School teachers considered teaching practice a "relief" as student teachers took up part of their teaching duties. Most student teachers were left to work on their own in the schools, with occasional visits paid by College supervisors. Unlike practices in other parts of the world, "mentorship" is unfamiliar to most local school teachers. Given these conditions in the school context, the implementation of the EFE and STP indeed involves changes in the school-institute relationship in initial teacher education.

In the teacher education institutions context, the Institute has experienced many personnel and structural changes in its infant stage of establishment. Whereas 1994 was its year of establishment, the Institute experienced a very great change in personnel at the beginning of the 1995-96 academic year with 60% of the existing teacher educators being replaced by new staff. This, together with the structural changes necessitated by the amalgamation of the former Colleges of Education, generated an unstable context for the implementation of the field experience programmes.

The 1995-96 implementation of EFE and STP

In the 1995-96 programme, the EFE took place in November 1995 while the STP in April to May 1996. About 500 student teachers were placed in some 115 secondary schools for the EFE and STP. Most of them stayed in the same school for the two phases of the field experience. Each of these student teachers had two teaching subjects out of a variety of 19 subjects. Cohort groups of student teachers were placed in the same school, ranging from the minimum of two student teachers to a maximum of twelve student teachers. This cohort placement of student teachers facilitates "a more communal perspective" to field experience in which student teachers proceed though their coursework and field experience together (McIntyre, 1996). As previously mentioned, the new teacher education programme was first implemented in 1994. Hence to the Institute staff as well as to schools, the 1995-96 EFE and STP still appeared novel to both Institute staff and schools.

Student teachers' evaluation of the Early Field Experience

Student teachers placed in the same secondary school evaluated the three-day Secondary School Attachment by completing a questionnaire on a group basis. In the questionnaire, they reported the activities they participated in the EFE and their views towards the EFE. Student teachers of 94% of the placement schools returned the questionnaire. On average, each student teacher observed 3.2 lessons taught by practising teachers during the three-day period, with the extreme situation where student teachers observed no lesson at all and the other extreme of observing as many as 12 lessons. Apart from classroom observation, schools arranged a variety of activities for student teachers like interviewing teachers, school principals or vice principals, touring around the campus attending school assemblies and interacting with pupils. (Appendix A).

Student teachers in 83.4% of the placement schools thought the EFE worthwile[1]. Most of them thought that the EFE helped them understand the realities of teaching. They valued the classroom observation opportunities and learned from the experience of practising teachers. They had a more comprehensive view about a secondary school and were aware of the multi-faceted responsibilities of a teacher. Some student teachers were impressed by the hospitality and enthusiasm of school principals and teachers. They also viewed the EFE as a preparation for the STP in that they could understand the teaching situations that they would face. Student teachers in 12% of the placement schools thought that the was not a worthwhile experience mainly because of the lack of classroom observation opportunities and other activities arranged by the schools. Student teachers attributed the phenomenon to the inadequate communication between the Institute and the placement schools.

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[1] The question is: Do you think that the attachement is a worthwhile experience? Student teachers 83.4% of the placement schools answered "Yes" and 12% "No", with 4.6% non-

Student teachers' evaluation of the Supported Teaching Practice-The survey

Student teachers evaluated the various aspects of the STP by completing a structured questionnaire. The questionnaire consists of four sections. Section 1 addresses the student teacher's experience in the placement school with particular reference to the frequency of participation in the wider aspects of school life and contact with the school teachers. In section II titled "Your attitude to teaching practice", the student teacher had a rate on a five-point Likert scale on a number of aspects, namely the school environment, the availability of resources, the medium of instruction, his/her own preparedness for the STP, work load and assignments, quality of support from teachers, quality of support from Institute tutors and an overall evaluation of the STP. Section III is an evaluation of peer support on a five-point scale. Finally, Section IV consists of free-response questions which mainly ask for the positive and negative aspects of the STP.

Student teachers completed the questionnaire on an individual basis and analysis was made on 401 returned questionnaires[2]. While the questionnaire aims at depicting a comprehensive picture of the STP, the present study focuses analysis on student teachers' overall evaluation of the STP and the effectiveness of the three levels of support.

Overall evaluation of the STP[3]

More than 80% of the respondents gave positive ratings to the STP in their professional development (Table 2). This corresponds the higher frequency of positive relative to negative statements in the free-response sections (Table 3 & 4). Indeed 87.5% of the respondents thought that the STP experience made them a more competent teacher. 78.6% of the respondents expressed in the free-response section that the most valuable aspect of the STP was having practical experience with teaching. The interpersonal aspect of the STP, especially student teachers' relationship with pupils, is another highly valued area of experience of the respondents. On the negative side, time seems to be the major concern. 16.2% of the respondents expressed dissatisfaction about the quantity of assignments. This negative view can be interpreted together with complaint about the short duration of the STP and the preparation period. It is probable that the shortness of the STP and the preparation period that caused some student teachers to complain about the quantity of assignments.

Support from the school[4]

Support from the school is indicated by a. the frequency of various forms of student teachers' contact with school personnel; b. student teachers' evaluation of the support they got from the regular Supporting Teachers; and c. their participation in the wider school life.

Student teachers had much more frequent contact with the Supporting Teachers than with the school principal. The most frequent form of contact with teachers was discussion about the classes that student teachers taught. Lesson observation was much less frequent, especially student teachers observing Supporting Teachers' lessons.

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[2] With the student teacher population being 490, 401 completed questionnaires represent a 81.8% response rate.

[3] Appendix B. shows the details of student teachers' overall evaluation of the STP.

[4] Appendix C shows the details of student teachers' evaluation of the "support from the school".

More than 60% of student teachers were satisfied with the quality of support from teachers in the briefing received on the classes taught and the advice on the use of teaching resources or ways of teaching certain classes.

Student teachers rarely participated in the wider aspects of school life other than classroom teaching. Attending assembly is the most frequent form of involvement other than classroom teaching. Nearly 60% of student teachers were never involved in extra-curricular activities, including school clubs and sporting events, at all. 66.1% of student teachers never attended any formal meetings, indicating that they never "experienced" the decision-making process in the school at all.

Support from the Institute[5]

As compared with the quality of support from teachers, the quality of support from Institute supervisors (Subject Tutors) was rated relatively more negative. The most negative response was that student teachers felt that they did not have adequate time to discuss their planning with the Subject Tutors before the STP. This echoes the finding that 40 student teachers suggested in the free-response section the lengthening of the preparation period. Only 48.8% and 61.6% of student teachers were satisfied with the support and advice they received from their tutors.

Support from peers[6]

Among the 213 student teachers who responded to Section III of the questionnaire, 52 of them were involved in subject-based teams in one of the elective subjects and 58 were involved in teams in both subjects. With regard to collaboration in lesson planning, 51.9% of student teachers with peer support in one subject preferred joint preparation of lessons to preparation on one's own. 48.2% of student teachers with support in both subjects reported that they often planned lessons with their peers. Those student teachers with peer support in one subject responded slightly more positively towards post-lesson reflective discussion than those with support in both subjects. For classroom discipline, about half of the respondents shwed agreement that having a peer in the classroom reduced discipline problems. A quick summary of the above data reveals that student teachers' evaluation to peer support was "fair". The finding that only 33% of the 103 respondents who had no peer support expressed the wish to have support from peers confirms this evaluation.

Insights on the implementation of the EFE and STP

Successful implementation of the Early Field Experience

Given that this is the second time the EFE was implemented in Hong Kong on such a large scale and involved ¼ of the secondary school, the EFE can be considered very successfully implemented in the light of the positive feedback given by more than 80% of the student teachers. Indeed, it was the first time that student teachers were placed in the same school for both the EFE and STP. Student teachers' understanding of the realities gained from the EFE as well as the preparation for the forthcoming STP in the same school helped reduce the "reality shock" that student teachers experienced in their first teaching practice.

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[5] Appendix D shows student teachers' evaluation of the "support form the institute"

[6] appendix E shows student teachers' evaluation of the "support from peers"

Utilizing peer support as a resource in the STP

"Research suggests the role that peers play in the development of teaching expertise is underused". (Hawkey, 1994). Mackinnon et al (1994) argues that shared experiences and discourse within forums among peers enable prospective teachers to reflect upon their own teaching. Hawkey (1995) argues that "effective and emotive aspects of learning to teach may characterize interactions between student teachers because of their shared position as student teachers and equal status as peers". Student teachers in the present research only gave a fair evaluation of peer support, which is much less positive than the findings in the student evaluation of the STP in the previous year (O'Halloran, 1995). This can be explained by the school placement arrangements. The 1994-95 cohort of student teachers were placed in teams while the 1995-96 cohort were placed as individuals in schools. The difference can be explained by the different constraints in the two placements. The 1995-96 arrangements allowed individual student teachers to have more classroom teaching opportunities as compared to those of the previous year. Yet the placement of student teachers as individuals rather than teams made the peer support less structured. Student teachers were left on their own to support their peers in ways as suggested in the student handbook. The less structured peer support may explain that student teachers did not experience the potential contribution of peer support in their professional development.

Structured peer support involves much more than merely placement arrangments. Various forms of collaborative work like collaborative planning and peer observation can be designed as tasks to be done during the STP. Preparation of student teachers for such tasks is very important. Roskos (1996) argues that "inserting sufficient joint and shared planning into preparatory coursework and beginning teaching may provide the additional practice and social support necessary for the advance of individual planning abilities." Willerman et al (1991) suggests *Peer Observation and Assistance (POA)* which comprises preconference, observation and postconference. In the preconference, the focus of the observation is agreed between the peers. Focused peer observation is essential for systematic reflective discussion in the postconference. Successful collaborative support can only take place when the preconference-observation-postconference activities take place in an integrated and interdependent manner (O'Halloran, 1995). Student teachers have to be well prepared for these activities. They need to have practice opportunities before the STP for systematic collaborative planning activities, lesson observation and post-lesson reflective discussion. Without adequate preparation for that, peer observation may turn out to be passive and undirected.

Soliciting more support from teachers

Practising teachers' craft knowledge and practical wisdom of teaching is a rich resource that has to be tapped as a source of learning in the STP. The present study indicates that teachers' support to student teachers was mainly in the form of discussion about classes. While this form of support was valued highly by student teachers, there is still room for soliciting other forms of support from teachers. The present study indicates that lesson observation between teachers and student teachers was infrequent. This is explained by the fact that lesson observation is not part of the culture of many

634

schools in Hong Kong. While the core of the STP is classroom teaching, the potentials of systematic lesson observation activities should be tapped to facilitate student teachers' development of teaching expertise.

Indeed, effective support to student teachers poses new professional demands on teachers, especially in Hong Kong where the concept of mentoring is not well-established in the teaching profession. Teachers need to appreciate their roles in the professional development of student teachers and understand their responsibilities within the teacher education programme. They have to develop an appropriate "language" to articulate professional knowledge in relation to a wide range of issues of professional practice and supervisory strategies including lesson observation skills and conferencing skills. Above all, having appropriate interpersonal skills for working with adult learners is also important (Tang, 1994).

Promoting student teachers' involvement in the wider aspects of school life

The finding that student teachers rarely participated in the wider aspects of school life confirms McCulloch's and Lock's (1992) finding that student teachers seldom have much involvement in the wider life of the school. Student teachers seemed to be locked into a closed circle of pedagogical activities (Stones, 1987). This reflects the disjointedness, narrowness and task inadequacy of student teaching. (Turney , 1988). To reap the potential benefits of professional encounters and learning experiences in the STP context, it is suggested schools be encouraged provide "whole school experience" to let student teachers to be "fully of the school, not simply in it" (McCulloch and Lock, 1992).

Strengthening the support from the Institute

Student teachers in the present study expressed the inadequacy of support that the Institute tutors offered as compared to school teachers. While this inadequacy of support can be partly explained by the "unstable environment" of the Institute context, due attention should be paid to improve the quality of support from teacher educators to student teachers.

Two roles of Institute supervisors are identified as creating learning environments for student teachers in the STP. The Subject Tutor provides support to student teachers in the area of classroom teaching, with emphasis on subject pedagogy. This involves coaching student teachers before the STP and preconference-observation-postconference activities during the STP. Establishing communication with the Supporting Teacher is a possibility of strengthening the institute-school support to the student teacher. Another role that has to be established is the General Tutor who plays a complementary role to the Subject Tutor. While the Subject Tutor looks after the classroom teaching experience of student teachers of his/her own subject, the General Tutor takes care of the whole group of student teachers in the same school. He/She prepares student teachers for the structured peer support and discusses with student teachers issues on classroom teaching as well as the wider aspects of school life. While clear definition of roles is needed, there should be adequate time for student teachers to meet their Subject and General Tutors for coaching before the STP. Constant evaluation and research on supervisory practices is also essential to the provision of quality support to student teachers.

Communication and shared understanding among various stakeholders

The previous discussion on ways of improving the STP implies closer partnership between the Institute and schools in initial teacher education. It involves some sort of reconcetpualization and restructuring of initial teacher education (Grimmett, 1995). The various roles have to be clearly defined in the conceptual framework of the STP. The roles of the General Tutor and Subject Tutor at the Institute level and the those of the teaching practice liaison person and Supporting Teachers have to be clearly identified. Yet clear definition of roles is a necessary but not the sufficient condition of success. The development of good communications with the various parties is very important. Communication has to take place at both administrative and interpersonal levels. Effective administrative communication in the system as well as positive communications between General Tutors and teaching practice liaison persons, between Subject Tutors and Supporting Teachers and with student teachers are important in developing confidence and positive attitudes towards the scheme. More importantly, through various levels of communication, a shared understanding of the scheme has to develop. In time, the improvement in practice can take place in a mutually adaptive model in which participants using some guiding principles in the conceptual framework of the STP bring their own contribution to the realization of the innovation (Foskett et al., 1994).

CONCLUDING REMARKS

The insights from the student evaluation of the EFE and STP shed light on the possibilities of student teachers learning in the multiple communities in field experience programmes. In these communities, peers, school teachers and other personnel as well as Institute supervisors are very rich educational resources. To improve field experience practices, due consideration has to be given to the articulative, operational and political dimensions of the professional endeavour. (Barone et al, 1996). The articulation of a theoretical framework of student teacher's of learning in the multiple communities of student teaching is important in developing dynamic, knowledge-based student field experience programmes as opposed to the static, craft-oriented nature of such programmes (Guyton and McIntyre 1990). The strategic planning of programme implementation at the enabling and action levles (Alexander, 1990) is vital to the operationalization of the programme platform. Last but not least, the political strategies of soliciting the support of various stakeholders is important to the success of field experience programmes.

References

Alexander, R. (1990). Partnership in initial teacher education: Confronting the issues. In Booth, M.B., Furlong, V.J. & Wilkin, M. (ed). *Partnership in Initial Teacher Training*. Cassell Educational Limited.

Barone, T., Berliner, D.C., Blanchard, J., Casanova, U. & McGowan, T. (1996). A future for Teacher Education: Developing a Strong Sense of Professionalism. In Sikula, J., Buttery, T. J. and Guyton, E. (ed.) *Handbook of Research on Teacher Education, Second Edition*. Macmillan Library Reference.

Foskett, N., Ratcliffe, M. and Bruner, D. (1994). Communication and Innovation. In Reid I., Constable, H. and Griffiths, R. (ed.) *Teacher Education Reform: Current Research*. Paul Chapman Publishing Ltd.

Grimmett, P.P. (1995). Reconceptualizing Teacher Education: Preparing Teahcers for Revitalized Schools. In Wideen, M.F. & Grimmett, P.P. (ed).*Changing Times in Teacher Education: Restructuring or Reconcept-ualization?* Falmer Press.

Guyton, E, & McIntyre, D.J. (1990). Studetn teaching and school experiences. Houston, W.R. (ed) *Handbook of Research on Teacher Education*, Macmillan, New York.

Hawkey, K. (1994) peer support. In Reid I., Constable, H. and Griffiths, R. (ed) Teacher Education Reform Current Research. Paul Chapman publishing Ltd.

Hawkey, K. (1995). Learning from peers: The experience of student teachers in school-based teacher education. *Journal of Teacher Education*, Vol. 46, No. 3, P. 175-183

Mackinnon, A.M. & Grunau, H. (1994). Teacher Development through Reflection, Community, and Discourse. In Grimmett, P.P. & Neufeld, J. (ed.) *Teacher Development and the Stugle for Authenticity.* Teachers College Press.

McIntyre, D.J. (1996). Field and Laboratory Experiences. In Sikula, J., Buttery, T.J. and Guyton, E. (ed.) *Handbook of Research on Teacher education, Second Edition.* Macmillan Library Reference.

McCullock, M. & Lock, N. (1992). Student teachers' school experience: the managerial implications for schools. In iCambridge Journal of Educaiton, 22(1).

O'Halloran, S. (1995). *The Development of Peer Support for Student Teachers during their First Classroom Teaching Practice.* Paper presented at the Twlfth Annual Conference of the Hong Kong Educational Research Association.

Ribich, F.M. (1995). Providing Meaningful Field Experiences. In Slick, G.A. (ed.) *The Field Experience: Creating Successful Programs for New Teachers.* Corwin Press, Inc.

Roskos, K. (1996). When two heads are better than one: beginning teachers' planning processes in an integrated instruction planning task. *Journal for Teacher Education*, Vol. 47, No. 2, p. 120-129.

Stones, E. (1987). Student (practice) teaching. *In International Encyclopedia of Teaching and Teacher Education..* Pergamon Press.

Tang, S. (1994). Reforming the school experience component of teacher education programmes. In TESU Forum, Vol. One, No. 2.

Turney, C. (1988). The practicum curriculum. *Journal of Teaching Practice*, Vol. 8, No. 1, p3-18.

Willerman, M., McNeely, S, L,. & Cooper Koffman, E. (1991). *Teachers Helping Teachers – Peer Observation and Assistance.* Preager: New York.

Appendix A.
Student teacher' experiences in the Early Field Experience

Table 1 Percentage of schools that arranged the following experiences for student teachers.

Interviewing teachers	98.1%
Interviewing the school principal/vice principal	94.4%
Touring around the school	86.1%
Attending assembly	66.7%
Interacting with pupils	50%
Interviewing the school social worker	40.7%
Observing extra-curricular activities	28.7%
Assisting in the preparation of teaching materials	8.3%

Appendix B
Student teachers' overall evaluation of the Supported Teaching Practice.

Table 2

	1 Strongly agree	2 Agree	3 Neither agree nor disagree	4 Disagree	5 Strongly Disagree	6 NA
Overall evaluation on teaching practice						
The experience has made me a more competent teacher	25.7%	61.8%	9.5%	1.2%	0.2%	1.0%
The experience has given me a positive view of teaching	23.7%	56.4%	14.5%	3.0%	1.2%	0.5%

Table 3 The five most frequently mentioned positive statements in the free-response section

	Frequency
The value of having practical teaching experience	315
Communication and relationship with pupils	166
Peer support, lesson observation and post-lesson discussion	36
Discussion with an support from Supporting Teachers	27
Discussion with and support from Subject Tutors	16

Table 4 The five most frequently mentioned negative statements in the free response section

	Frequency
Too many assignments, including lesson plans	65
Short period to STP	43
Short preparation period	40
Inadequate financial support or resource support	29
Inadequate support from Subject Tutors	28

Appendix C
Student teachers' evaluation of "support from the school"

Table 5

	1 often	2 rarely	3 Never
Contact with the teachers			
The regular supporting teachers discussed the class with me	60.1%	33.7%	5.7%
I observed the regular supporting teachers' lessons	21.7%	39.4%	37.4%
The regular supporting teachers observed my lessons	28.7%	55.1%	15.0%
The regular supporting teachers discussed my progress with me	38.7%	45.1%	15.0%
The principal discussed the school with me	6.5%	49.1%	42.4%

Table 6

	1 Strongly agree	2 Agree	3 Neither agree nor disagree	4 Disagree	5 Strongly disagree	6 NA
I was happy with the briefing I received on my classes	11.0%	49.4%	26.4%	8.0%	4.0%	2.7%
I got good advice on teaching resources I would need	12.5%	50.4%	24.4%	8.7%	2.5%	1.7%
I was given good advice on how to teach the class	14.0%	53.1%	22.2%	7.5%	1.7%	1.5%

Table 7

	1 Often	2 Rarely	3 Never
Participation in wider aspects of the life of the school			
I attended school assembly	53.9%	28.9%	17.2%
I was involved with school clubs	11.0%	28.2%	58.1%
I participated in school sporting events	11.5%	28.2%	59.4%
I attended formal meetings with other members of staff	11.5%	21.9%	66.1%
I had other opportunities to be involved in school activities outside the classroom	18.5%	44.4%	36.9%

Appendix D
Student teachers' evaluation of "support from the Institute"

Table 8

	1 Strongly agree	2 Agree	3 Neither agree nor disagree	4 Disagree	5 Strongly disagree	6 NA
Quality of support from Subject Tutor						
I had adequate time to discuss my planning with my Subject tutors before teaching practice	2.7%	28.2%	33.7%	26.2%	7.5%	1.5%
I was satisfied with the support I received from my Subject tutor	5.2%	43.6%	33.4%	11.7%	3.5%	2.0%
I was satisfied with the advice I received from my Subject tutor.	8.2%	53.4%	25.9%	8.5%	2.0%	1.5%

Appendix E
Student teachers' evaluation of "support from peers"

Table 9

	1 Strongly agree	2 Agree	3 Neither agree nor disagree	4 Disagree	5 Strongly disagree
Peer support while teaching ONE elective subject					
I preferred planning lessons with a peer rather than planning on my own	11.5%	40.4%	21.1%	11.5%	1.9%
I got useful follow-up advice from peers who observed my lessons	26.9%	51.9%	9.6%	1.9%	9.6%
Having a peer in the class resulted in fewer discipline problems	15.4%	25%	38.4%	7.7%	1.9%
Post-lesson reflection was better when I could discuss the lesson with my peers	23.0%	48.1%	15.4%	0.0%	1.9%
No. of respondents: 52					

Table 10

	1 Strongly agree	2 Agree	3 Neither agree nor disagree	4 Disagree	5 Strongly disagree
Peer support for BOTH elective subjects					
I often planned my lessons with one of my peers	12.0%	36.2%	8.6%	20.6%	5.1%
Lesson planning with a peer is effective	15.5%	44.8%	18.9%	1.7%	6.8%
Teaching with one of my peers meant that we had fewer discipline prblems	8.6%	41.3%	22.4%	10.3%	8.6%
I found it easy to work with my peers	37.9%	39.6%	10.3%	5.1%	6.9%
No. of respondents: 58					

Table 11

	1 Strongly agree	2 Agree	3 Neither agree nor disagree	4 Disagree	5 Strongly disagree
No peer support for either elective subject					
I would have preferred to have had support from my peers	2.9%	31.1%	31.1%	23.3%	11.6%
No. of respondents: 103					

Topic Three

Preparing Teachers for School Reform

THE IMPACT OF GLOBAL EDUCATION ON DEVELOPING TEACHER TRENDS TOWARDS WORLD CIVILIZATION

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INTRODUCTION

Jordan has been witnessing a comprehensive educational reform since the mid-eighties. The focus was on school reform to face the challenges of change. The comprehensive review of the education system resulted in the plan of comprehensive development of education, with its 2 phases : (1)- (1989-1990) (2)- (1996-2000).

The Ministry of Education, in its efforts to achieve the objectives of the conference, set down new curricula textbooks and manuals and established the centre for Educational Training for teachers, principals, supervisors and leaders. The centre adopted a strategy for applying innovative programs gradually in the field. Global Education was one of these programs. This study was conducted in response to an invitation from the International Centre on Education for Training to participate in the conference with will be held in Amman-Jordan (16-21/12/1996). The study aims to find out the impact of this Educational innovation program on developing teacher trends towards world civilization, which harmonizes with the philosophy of education, knowing that several other evaluation studies tackled this issue too.

Global education ; concept and background :

The concept of global education was effected by educational trends in the U.K., international understanding being the first trend which was highlighted in (1918) in "The New Era" journal which was later called "World Education". Its vision was that understanding among nations leads to tolerance, respect, and peace. This vision was disseminated in the U.K. through the Council of Education for Global Citizenship, established in 1939. James Henderson was the first academician interested. Then parties were formed in the British Parliament - the British Group for Global Government which established "The Unified World" in 1952. This Union prepared curricula for world studies in 1973 and a teachers' manual which was called " Learning for change in a global society" , Richardson, 1979. Simon Fischer and David Huckson, in 1980, started to implement the project of global studies, which was partially financed by the Schools Journal in Lanceste, (Fisher & Hicks, 1985).(1)

There is another trend which sees the roots of global studies in the world movement in the U.S.A. In 1983. Staren Lamy sees that global education movement as part of the U.S.A. national arsenal.

Its objective was strengthening various types of influence in the world, especially in regions the U.S.A. is interested in, as indicated in Anderson's(2) and Hanvey's (3) works on global interdependence and schools' responsibility in raising generations for global citizenship.

The third trend which affected the concept of global education was the curricula of environmental, gender, human rights, multicultural, anti - discrimination, and peace education, as well as education for individual and social development. The fourth trend focused on the teaching/ learning process, refusing the authoritarian method of teaching which was clear in charles Dicken's "Hard Times in Dewey's writing in the U.S.A. and Taghour's in India and Montesouri's, in Italy. The progressive school movement began in England at the beginning of the 19th century and it focused on individualism, self - achievement, and learning through real experiences (Richardson, 1979) (4).

The educational groups and trends mentioned above had an impact on the development of global education which made teachers and students aware of the trends of life for the 21st century. The MOE was keen to respond to the UNICEF Initiative in 1993 to apply global education whose objectives harmonize with the objectives of the National Conference for Educational Development.

The researchers see that global education is a modern response to the urgent need of today's children for living in an interdependent, rapidly changing world, in which economic, political, and social systems are getting more complicated, and cultural pluralism prevails.

According to Picke, Selby (1988), the objectives of global education are the following :

- Awareness of systems through
- Awareness of the various thinking trends of nations.
- Awareness of the material, social, and psychological health of the global and the future trends which will effect human beings.
- Awareness of world civilization and readiness to take part in it.
- Scientific tendency and eagerness to continue self - development.

The concept of global education in Jordan meant using integrated teaching/ learning methods and activities which match curricula and textbooks directly or indirectly , taking into consideration the following objectives :

- Consolidating awareness of the relationship between the earth and the people living on it.
- Looking at the relationship among the past, present, and future as being dynamic.
- Being aware of issues affecting life, such as environmental harm, denial of human rights, ethnic conflicts, and inequality.
- Being personally aware of people's problems, ambitions, readiness, and environments (Abuashaikh 1994).

The following procedures were taken to apply the global education program in a limited number of schools in the Kingdom :

1- Several special teams of educational supervisors, curricula members, and distinguished teachers developed activities for the 4th, 5th, 6th, 7th basic classes in Arabic, Islamic education, social education, civics, mathematics, science, and vocational education, after they were trained by experts from the world Education Institute in Toronto, Canada (The UNICEF national advisor to the program, Graham Pike, David Selby, OMER Al-Shaikh) (6).

2- Teachers and supervisors who desired were trained for the application and following - up of these activities and prior to that, a core team was trained intensively by the same experts. The outputs of the program were evaluated from the students' and supervisors' point of view, to determine the changes in the teaching / learning process. The students were interested in and satisfied with the evaluation results and supervisors and principals were satisfied with the educational environment and change of the role of the student and teacher.

Study purpose and questions

The aim of the study was to answer the following questions:

1- Is there an impact of the teachers training program in Global Education on developing their trends towards world civilization?
2- Are there any differences of statistical significance in developing teacher trends according to gender, qualification, age, and experience (> . 05).?

Study limit

This study was limited to the teachers of government and private schools who joined the Global Education program for the academic year 1995/96. Due to the fact that the instrument used in this study was prepared by the researchers and not standardized scales, the results of the study were affected by the limitations of the instrument used.

METHOD AND PROCEDURES

Study Population

It constituted the government and private school teachers who joined the Global Education Program for the academic year 1995/96. The teachers selected were from Basic cycle schools in 7 governorates of the Kingdom. They were social education, civics, and general science teachers. Their number was 149, (59 males, 90 females), as indicated in Table No. (1).

Table No. (1)
Distribution of the individuals of the study population according to governorates and gender

No.	Governorate	Male	Female	Total
1-	Amman	11	33	44
2-	Salt	6	10	16
3-	Madaba	6	10	16
4-	Kerak	12	7	19
5-	Irbid	4	11	15
6-	Jerash	5	7	12
7-	Zerqa	15	12	27
	Total	59	90	149

Study sample

Due to the small number of the sample individuals and to be more accurate the researchers limited it to 40.3%, distributed as indicated in Table No. (2).

Table No. (2)
Distribution of the study sample according to governorates and gender

No.	Governorate	Male	Female	Total
1-	Amman	5	22	27
2-	Madaba	6	5	11
3-	Zerqa	9	6	15
4-	Irbid	-	7	7
	Total	20	40	60

Study variables

a) Independent variables
- 1- Gender : consists of 2 levels :
  - a- Male
  - b- Female
- 2- Academic qualification : consists of 2 levels :
  - a- B.A.
  - b- Community college
- 3- Age : consists of 2 categories :
  - a- 20 - 30 years.
  - b- 30 years and over
- 4- Experience : consists of 2 categories :
  - a- 1 -10 years.
  - b- 10 years and over.

b) Dependent variables : the friends of the sample individuals towards openness to world civilization and positive participation in it, as measured by the study instrument applied on the sample.

Study instrument

A test was designed to find out the impact of Global Education Program on developing teacher attitudes in Jordan. It consisted of 19 items in various fields. The researchers looked into the literature on the subject prior to designing the test and the number of items on each field were different because the researchers took into consideration the Global Education Program in general only.

Study Validity

The test was judged by eleven specialized trustees members, from the University of Jordan and the MOE. There were 32 items, reduced to 19 items in their final form, as indicated in Annex No. (1).

Study Procedures

- A test of 19 items was designed.
- The test was judged by specialists from the university of Jordan and the MOE.
- The study population was restricted to teachers of government and private schools who participated in the Global Education Program.
- The study sample represented 40.3% of the study population.

- The tests were distributed on the study sample by hand, collected and the results were recorded.
- The points were recorded on special forms whereby the number of each individual, gender, qualification, and experience was indicated.
- The points were entered into the computer and analyzed, each question by the analysis proper to it, at the General Directorate of Research and Studies by (SPSS).

Statistical analysis

After collecting the tests, the researchers gave each answer on each item a numerical value as follows :

High	: 2 points
Medium	: 1 point
Low	: Zero

- To answer the first question, means, standard deviations, percentages were calculated.
- To answer the second question, T-test for dual comparisons was used.

Study results

The researchers adopted the following scale to indicate the degree of developing teacher trends towards world civilization, after consulting experts :

70%- 100%	High
50% - 70%	Medium
50% and less	Low

First question : Means, standard deviations, and percentages for each item were calculated, as indicated in Table No. (3) as follows :

Table No. (3)
Means , standard deviations, and percentages of positive trends of teachers towards world civilization

No.	Item	Mean	Standard Deviation	%
1-	Disarmament of mass destruction weapons.	2.0	0	100%
2-	The world could have one language	1.25	0.95	60%
3-	World activities such as Olympics and World Cup Finals	1.53	0.81	73%
4-	Your son's participation in world campaigns	1.80	0.57	88.3%
5-	How do you feel when you hear about an earthquake in a certain region?	1.50	0.65	58.3%
6-	Spread of modern communication means such as Internet, satellite, fax	1.78	0.55	85%
7-	Spread of epidemic in a certain region	1.75	0.59	78.3%

Cont. Table (1)

8-	How to resolve conflicts between countries?	1.68	0.65	78.3%
9-	Minorities in some countries	1.63	0.60	70%
10-	Expenditure for space discoveries	1.400	0.74	55%
11-	World fashion shows	0.85	0.93	36%
12-	Right of residence in any country	1.50	0.81	70%
13-	Right to choose the spouse from any race, religion, or ethnic group.	1.40	0.80	60%
14-	The expansion of the ozone hole is endangering life.	1.55	0.72	68.3%
15-	Discovery of a plant in the Jordan desert which helps in the cure of AIDS	1.63	0.60	70%
16-	Interest of some people in publications concerning a specific culture.	1.64	0.72	60%
17-	Political, economic, and social equality of women	1.18	0.91	51.7%
18-	The phenomenon of women to propose in marriage.	1.08	0.94	48.3%
19-	Determination of the number of family members internationally	1.200	0.97	58.3%

1- The percentage on nine items was high (70%-100%). These items are indicated in the following Table No. (4) in descending order:

Table No. (4)

Items of high percentage on developing teacher trends, and their means

No.	Item	Mean	Percentage
1-	Disarmament of mass destruction weapons	2.00	100%
2-	Your son's participation in world campaigns	1.80	88.3%
3-	Spread of modern Communication means such as Internet, Satellites, Fax.	1.78	85%
4-	Spread of an epidemic in a certain region.	1.75	78.3%
5-	How to resolve conflicts between countries?	1.68	78.3%
6-	World activities such as Olympics and World Cup Finals	1.53	73%
7-	Minorities in some countries	1.63	70%
8-	Right of residence in any country	1.5	70%
9-	Discovery of a plant in the Jordan desert which helps in the cure of AIDS	1.63	70%
	Total	1.7	

The percentage on No. (1) was the highest (100%), while on the other eight items it was medium, ranging between 50% - 70%). They are indicated in Table (5), in descending order.

Table No. (5)
Items of medium percentage on developing teacher trends, and their means

No.	Item	Mean	percentage
1-	The expansion of the ozone hole is endangering life.	1.55	68.3%
2-	The world could have one language	1.25	60%
3-	Interest of some people in publications concerning a specific culture.	1.46	60%
4-	Right to choose the spouse from any race, religion, or ethnic group.	1.40	60%
5-	How do you feel when you hear about an earthquake in a certain region?	1.50	58.3%
6-	Determination of the number of family members internationally	1.20	58.3%
7-	Expenditure for space discoveries	1.40	55%
8-	Political, economic, and social equality of women.	1.18	51.8%
	Total	1.3	

The percentage on 3 items were low (less than 50%). Table No. (6) indicates this in descending order.

Table No. (6)
Items of low percentage on developing teacher trends and their means

No.	Item	Mean	Percentage
1-	The phenomenon of women to propose in marriage.	1.08	48.3%
2-	World fashion shows	0.85	36%
	Total	0.9	

Second question : To answer the second question, the researchers used T-test and the results were as follows :

a) There were no differences of statistical significance (> .05) attributed to gender, as indicated in Table No. (7).

Table No. (7)
Results of T-test attributed to gender

Sex	Mean	T-test value	Statistical significance
Male	28.25		
Female	29.55	1.15 -	0.256

Item No. (11) indicated statistical significance (> 0.5) for females, as indicated in Table No. (8).

Table No. (8)

Item of statistical significance (> 0.5)

Item	Mean		T-test	Statistical Significance
	Male	Female		
World fashion shows	0.500	1.025	0.21 -	0.033

b) There were no differences of statistical significance (> .05) attributed to qualification, as indicated in the following Table No. (9) :

Table No. (9)

Results of T-test of the qualification variable

Qualification	Mean	T-test value	Statistical significance
B.A. Community college	28.46 29.33	0.54 -	0.598

Item No. (2) indicated statistical significance (> .05) for community college diploma, as indicated in Table No. (10).

Table No. (10)

Item of statistical significance for Community College Diploma holders

Item	B.A.	Community college	T-test value	Statistical significance
The world could have one language	0.733	1.422	2.45 -	0.023

There were no differences of statistical significance (> .05) attributed to age as indicated in Table No. (11).

Table No. (11)

Results of T-test on the age variable

Item	Mean	T-test value	Statistical significance
20-30 30 and over	28.75 29.20	0.23-	0.818

There was statistical significance (>.05) on item No. 19 in favour of those whose age was 30 and over, as indicated in the following table No. (12).

Table No. (12)

Item of statistical significance (> .05) for age 30 over

Item	Mean		T-test value	Statistical significance
Determination of the number of the family internationally	0.666	1.33	2.12-	0.050

There were differences of statistical significance (> .05) in attributed experience, as indicated in Table No. (13).

Table No. (13)
Item of statistical significance (α > .05) for experience

Years of Experience	Mean	T-test value	Statistical significance
1-10	28.1		
10 and over	29.62	1.16-	0.258

There was differences of statistical significance (α > .05) in item No. (12) for those who had ten years experience and over, as indicated in Table No. (14).

Table No. (14)
Results of T-test on the experience variable (10 years & over)

Item	Mean		T-test	Statistical significance
Right of residence in any country in the world.	1.100	1.700	2.6 -	0.014

CONCLUSIONS

The conclusions of the study were the following :

- The general trend towards world civilization was positive with a high degree.
- There were no differences of statistical significance (α ≥.05) for trends towards world civilization attributed to gender.
- There were no differences of statistical significance (α≥.05) for trends towards world civilization attributed to qualification.
- There were no differences of statistical significance (α≥ 0.05) for trends towards world civilization attributed to age.
- There were no differences of statistical significance (α ≥ .05) for trends towards world civilization attributed to experience.

The researchers analyzed the results of the study dealing with each question separately.

Regarding the first question, the percentages of teacher trends towards world civilization were high (70%-100%).

Nine items out of 19 were with a high percentage, which indicates that the Global Education Program focused on several human values, the most important of which were peace, intercultural interaction through world communication , openners to the use of technology as a means of world participation, and cooepration in facing diseases and natural disasters, as well as using dialogue for resolving conflicts.

The sample individuals, on the other hand, didn't have tendency to openness in certain items such as women proposing and fashion shows due to the social, conventional restritions prevailing in Jordan.

Regarding the second question, there were no differences of statistical significance attributed to gender, qualification, age, or experience, due to the fact that they all participated in one training program of equal duration. However, dual comparisons according to gender, item (10) "world fashion shows" indicated differences of statistical significance for females because women are more positive in this area.

Dual comparisons according to qualification, item (2) "One global language" indicated differences of statistical significance for holders of community college diploma because they have a desire for academic upgrading.

Dual comparisons according to age, item (19) "Determining the number of family members in the world" indicated differences of statistical significance for the age category 30 and over because they went through marriage, birth, economic, and social problems as a result of not controlling birth.

Dual comparisons according to experience, item (11) "Right of residence in any country in the world" indicated differences of statistical significance for those with 10 years of experience and over, because they matured and gained self confidence, and were convinced of the importance of openness to other cultures.

RECOMMENDATIONS

The researchers recommend the following :

- Generalizing the Global Education program on all the MOE employees.
- Expanding the training program base to include positive, flexible trends to absorb other variables.
- Consolidating the program by adding subjects which focus on women's role, quality, and general opennes.
- Conducting comparative studies for geographical areas in Jordan to find out the impact of the program on trends of teachers in the urban and rural areas towards world civilization.

References

Fisher, Sand Hicks, D.W. (1985) world studies 8-13 A teacher handbook, Oliver & Boyed (1979).

Anderson, L. Schooling and (citizenship) in a Global Age an Explanation of the Meaning and significance of Global Education, Bloomington, Indiana.

Anderson, L.Schooling and (citizenship) in a Global Age an Education, Bloomington, Indiana.

Richardson, R. (1979) Learning for change in world society. Reflections. Activities and Resources world studies project.

Abuashaikh, Mustafa, (1994), Comprehensive Education Applied in Jordan Risalat Al-Mualim/Amman/Ministry of Education.

Pick G. and Selby, D.(1988) Global Teacher, Global Learner Hodder and Stoughton Education Nill, Rood Dunton Green, Sevenoaks.

Annex No. 1

School :

Directorate:

Age :

Sex :

Experience :

Qualification:

Dear Teacher ,

You are kindly requested to express yourself towards the following items (not exceeding one line), taking into account that this study is conducted only for academic objectives.

1- Disarmament of mass destruction weapons.
2- The world could have one language.
3- World activities such as Olympics and World Cup Finals.
4- Your son's participation in world campings.
5- How you feel when you hear about an earthquake in a certain region?
6- Spread of modern communication means such as Internet, Satellite, Fax.
7- Spread of epidemic in a certain region.
8- How to resolve conflicts between countries?
9- Minorities in some countries.
10- Expenditure for space discoveries.
11- World fashion shows.
12- Right of residence in any country.
13- Right to choose the spouse from any race, religion, or ethnic group.
14- The expansion of the ozone hole is endangering life.
15- Discovery of a plant in the Jordan desert which helps in the cure of AIDS.
16- Interest of some people in publications concerning a specific culture.
17- Political, economic , and social equality of women.
18- The phenomenon of women to propose in marriage.
19- Determination of the number of family members internationally.

GRAPHING CALCULATORS : TEACHER PERCEPTION, TRAINING, AND ATTITUDE

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INTRODUCTION

Mathematics education is approaching a state of crisis. Data from national and international assessments of educational achievement have made it clear that, compared to their peers in many other parts of the world, American pupils test well below what educators and the public consider acceptable on all but the most basic levels of mathematical knowledge (National Council of Teachers of Mathematics, 1988). At the same time, information technologies such as computing are becoming more and more important in daily life. This is in part a result of the development and spread of the so-called "Information Superhighway." Now more than ever, citizens need a thorough understanding of advanced mathematical concepts. Yet mathematics education in the public schools does not seem to be keeping pace with these developments.

In response to this need, the National Council of Teachers of Mathematics (NCTM) produced a series of documents that described a vision for mathematics reform for the 1990s. The Curriculum and Evaluation Standards for School Mathematics and the Professional Standards for Teaching Mathematics were produced to inform mathematics educators of the specific goals proposed for improving mathematics instruction. These goals were based on the assumption that all students are capable of learning mathematics. The need to encourage each student to develop to their full potential in a culturally diverse society is essential for progress for personal fulfillment and for society as a whole. In other words, there is a need to maximize each student's potential by fostering growth that reaches their highest expectations. "To do otherwise represents a waste of human potential." (Assessment Standards for School Mathematics, NCTM, 1995, p.1)

The main controversy focused on whether or not calculators would be beneficial or harmful to learning. Teachers views on whether or not to allow calculator usage were decidedly mixed, as were those of the general public. One argument against calculator use was that the hand-held computing machine would displace students' skills with mental arithmetic and with paper and pencil algorithms; the resulting loss of skills would be disastrous. Other educators, however, had more positive views. They believed that students would be more likely and eager to solve problems if they had the opportunity to eliminate tedious procedural steps, and thus would be more likely to develop problem-solving methods. The debate about calculator effects induced a flurry of research, one of the largest such efforts for any topic in mathematics education (Suydem, 1982).

By 1995, the Assessment Standards for School Mathematics again focused on using calculators at all levels of education. Most teachers were reluctant to voice their agreement to using calculators, but eventually the agreement was expanded to allow questions about curriculum as well as about teaching strategies and assessment. With the advent of the information age, what mathematics topics should be taught, and which topics should be eliminated? To truly utilize the potential of technology in mathematics education, many changes would have to happen.

Calculator Use

Among mathematicians and mathematics educators, there is now strong support for making appropriate use of calculators in mathematics classrooms. Because of their power and flexibility, graphing calculators are receiving special attention. The use of graphing calculators is a recent enough innovation that it is just now beginning to develop its own research base. There is evidence that calculators are currently being used in many precalculus classes (Trotter, 1991). Some researchers (Demana & Waits, 1990; Durham, 1990; Fey, 1989; Kaput, 1989; Senk, 1992; Waits & Demna, 1989) suggests that the use of graphing technology provides an opportunity to produce a deeper understanding of mathematics among students. They believe students who use this technology are able to focus on realistic applications.

The graphing calculator is a powerful tool for the mathematics instructor. It can be an integral part of discovery teaching, a process that maximizes student learning. In this approach, which combines inductive and deductive reasoning, the teacher serves as a facilitator, asking the right questions and providing specific examples so that students can make their own generalizations. Thus through discovery students develop the concepts necessary to make appropriate applications. Graphing calculators are particularly appropriate for use with the discovery method in mathematics courses, since they encourage students to access mathematical concepts from an intuitive perspective (Bright, Waxman, and Williams, 1994).

An important assumption implicit in the NCTM Evaluation Standards is that calculators and computers will be available in all classrooms. In the case of algebra, precalculus, and calculus classrooms it is assumed that graphing calculators will be used to change the way mathematics is being taught. At present, however, most mathematics teachers operate in a teacher-centered instructional environment. Calculator use would allow such student-centered learning to take place. As Lichtenberg (1988) rightly points out, the use of calculators can make math more accessible to more students and enable all mathematics students to investigate problem situations that are otherwise difficult to grasp.

Purpose of the Study

The purpose for conducting this study is to answer the questions:

1. Is there a significant relationship between secondary-school mathematics teachers' years of teaching experience, training in calculator usage, preferred teaching strategy, attitudes toward calculator use, use of graphing calculators, and gender, and the achievement scores of students enrolled in Algebra I courses where graphing calculators are used?

2. What are the differences in the perceptions, training, teaching strategies, and attitudes of secondary-school mathematics teachers who do not use graphing calculators and those who do?

3. Is there a significant difference between achievement scores of those students whose teachers use graphing calculators in the Algebra I classroom and those whose teachers do not?

In addition, an addendum is added for the purpose of indicating implications for improving mathematics education in Jordan. Calculators are not being used at all in mathematics education at this time. The finding of this study and the valuable experiences learned by the researcher will be beneficial to enhance the teaching and learning process.

Definition of Terms

Graphing Calculator: Texas Instrument TI-81 calculator that graphs Algebraic equations.
Attitude: Enjoyment and interest as measured by attitude survey.
Teacher Training: Specific training in the use of graphing calculators.
Years of Teaching Experience: The number of years they have been teaching mathematics.
Teaching Strategy: Using organized methods in teaching mathematics, such as discovery, inductive, deductive, traditional, cooperative learning, or any combination of these.
Algebra I Classes: Classes where students study the first course in Algebra.
Algebra I Teachers: Teachers who use the Algebra I textbook in their classes.
Student Achievement Scores: The final mathematics grades at the end of the 1995 school year, as measured by the Common Test for Algebra I classes. This test is administered by the Mathematics Department of the Omaha Public Schools.

Review of Literature

The use of hand-held calculators in the classroom is a widely-discussed and sometimes controversial subject among educators. Numerous studies have been conducted seeking to establish the effect of calculators on student mathematics achievement and students' attitudes toward mathematics in general. There appears to be as many studies showing significant positive effects as there are studies showing no significant differences.

The scholarly literature on the use of calculators in the classroom and their effects on mathematics education reflects the historical tension in the educational community between the need for innovation and the desire to "stay the course." In the following review of literature three specific areas are covered: effects of calculators use on student achievement scores, attitudes toward the use of calculator, and teacher training for the use of calculators in the classroom.

Effect of Calculator Use on Achievement Scores

Most studies focusing on the use of pocket calculators in the classroom have concentrated on the effect calculator use had on student achievement. Of the major topic areas covered in the present survey, effects on achievement has by far been the one given the most attention by researchers. Although the findings appear to be somewhat mixed, the findings in the literature as a whole seem to indicate that calculator use has no negative effect on students' mathematics achievement and may even enhance achievement scores (Ruthven, 1990; Vazquez, 1991; Rich, 1991; Dinkheller,1994; Paschal,1995; and Alexander, 1993).

A study to determine the impact of graphing calculators on precalculus students' understanding of functions and their graphs was conducted by Devantier (1993). He used a test instrument administered in seven precalculus classrooms in the mid-western United States. This instrument was administered to each classroom twice, once as a pretest and once as a posttest. Analysis of the participants' responses showed that students with experience in using calculators had a superior understanding of functions and their graphs compared with students who had no calculator experience.

Chandler (1993) conducted a study aimed at gathering information on the mathematics achievement of high school students who used graphing calculators. The topic chosen for this study was the transformation of functions. The sample consisted of nine precalculus classes at a suburban high school in the Houston area. Four of the classes were in the control group and five were in the experimental group. Three different teachers and 173 students participated in the study. The results showed the adjusted mean of the experimental group (106.78) was statistically significantly higher ($p < .038$) than that of the control group (102.90). The students with access to graphing calculators were able to outperform those who were in non-calculator classes.

Other studies (Bitter,1993; Martin, 1994; Ottinger, 1994) have found significant positive impacts on student achievement and attitude. Research by Denvantier (1993), Chandler (1993), Giamati (1991), Rich (1990), Oster (1995), Kennedy (1994), Stiles (1995), Dion (1990), and Vazques (1991) have provided support for using graphing calculators to affect students' understanding of functions and related topics. Still other studies, such as those of Alexander (1993), Dunham (1991), Ruthven (1990), Dinkheller (1994), Scott (1995), Army (1991), and Thomasson (1993) provide empirical evidence that the use of graphing calculators improves mathematics achievement.

While the above studies showed significant benefits in the use of graphing calculators, other studies have found no significant gains in achievement through graphing calculator use. (Emese,1993; Hall, 1993; Upshaw,1994; and Giamati,1990).

In summary, the scientific literature shows, on the whole, that the use of graphing calculator is effective at all levels in enhancing achievement in mathematics. Preliminary findings on the use of graphing calculators with interactive graphics and symbol manipulation also indicate the presence of a positive effect on student achievement. Calculator use also seems to have a positive effect on student attitudes toward their use and toward mathematics in general, as may been seen in the next section.

Attitudes toward the Use of Calculators

Attitudes toward the use of pocket calculators in the classroom and toward mathematics in general have also been an important focus of interest throughout the literature. Most studies on this topic have found that calculators improve students' attitudes toward learning mathematics even if these improved attitudes did not always translate into improved performance on achievement tests.

(Thomasson,1993; Stiles,1995; Scott,1995; Army,1991; and Hembree and Dessart,1986).

Teacher Training Research

New technologies are constantly being developed, and new applications for existing technologies are constantly appearing. However, if new innovations are not applied correctly, even the most advanced technology is useless. What this means to the educator is that if we do not take the time to train our teachers on the proper use of new technology then the technology will be of no use to students. We can understand how important it is for educators to keep up with the latest developments in technology when we realize that the students of today will be the teachers of tomorrow. Many studies have been done on teachers trained in the use of technological innovations such as computers, microcomputers, and calculators as they can be used for teaching mathematics; these studies show how teachers may be trained in the use of computational technology to best serve the needs of their students. (Ichrom, 1993; Dana,1994; Lamon and Sanner,1991; Dickey and Kherlopian, 1987; Phipps,1993; and Enoc, 1994).

In summary the use of instructional technologies has received a great deal of attention over the past twenty years. The use of computational technologies has been of particular interest to mathematics teachers, who are eager to understand the possible implications of the use of computers and pocket calculators in the classroom even as they express concern about the possible negative effects of such devices on student performance, attitudes, and skill acquisition and retention. Teachers also worry about how to use computational technology in the classroom, and if such use might do harm to their own skills as teachers and to the teacher-student relationship.

Research in the use of hand-held graphic calculators in the classroom seems to indicate that, so far at least, calculators have little negative effect on learning and may have a number of positive effects. Calculators, especially those capable of displaying information graphically, seemed to be of particular utility in helping students of algebra: not only do they aid in solving algebraic problems, but preliminary research suggests that students who use graphing calculators may develop a more intuitive understanding of algebraic concepts. However, research into graphing calculators is in its infancy: little research exists prior to about 1985, though as calculators are still new to the mathematics classroom ("new" relative to the normal pace of educational change), this situation is to be expected. Thus many gaps in our knowledge yet remain, and more research will need to be done before a complete understanding of the interaction between calculators and the classroom environment is possible.

Research design

This study is a causal comparative (ex post facto) research, because causes are studied after they presumably have exerted their effect on the other variables (Walter & Meredith, 1989).

Population and Sample

The population of this study included all teachers in the Omaha Publics Schools (OPS) teaching Algebra I classes during the 1995-96 academic year, as well as all of their students. The sample of this study consisted of 43 teachers and 1,697 students. This sample consisted of two levels: middle-school and high-school Algebra I teachers employed by the Omaha Public Schools in Omaha, Nebraska. Each of these levels was in turn divided into two groups according to whether they used or did not use graphing calculators in the classroom. Table 1 shows the breakdown of the sample by school level and use or non-use of graphing calculators, and shows the number of teachers or students in each subgroup.

Table (1)
Study Sample by Characteristic Surveyed

	High School		Middle School		Total	
	Teacher	Student	Teacher	Student	Teacher	Student
Use graph-ing calculator	13	549	12	451	25	1000
Don't use	9	436	9	261	18	697
Total	22	985	21	712	43	1697

INSTRUMENTS

Achievement Test

The achievement test used in this study was administered by the mathematics department of the Omaha Public Schools. This instrument contains 45 multiple-choice items testing for achievement and understanding of beginning algebra concepts, functions, and applications, and specifically covers the content studied in the Algebra I course. The items on the test were selected by the Algebra teachers and by the supervisor of mathematics for the Omaha Public Schools. Mathematicians and mathematics teachers have validated the test, and its reliability coefficient using the Kuder-Richardson formula (K-R20) was 0.87.

The Survey

In addition to measuring student achievement by means of the test described above, data on teacher training, preferred teaching strategies, and teacher attitudes toward technology were collected by means of a survey. The graphing calculator survey was validated by the following groups: 1) four university faculties from the Teachers' College at the University of Nebraska-Lincoln (UNL), 2) the supervisor of mathematics and five mathematics teachers from Lincoln Public Schools, and 3) the supervisor of mathematics and five mathematics teachers from Omaha Public Schools. A reliability coefficient of 0.86 was found using Cronbach's Alpha method. The survey contained six sections, one for each of the teacher traits to be investigated: 1) perceived value of using graphing calculators to teach Algebra I courses, 2) training in the use of graphing calculators, 3) instructional use of graphing calculators, 4) teacher attitudes toward calculator use in the classroom, 5) instructional strategies, and 6) demographic characteristics.

Statistical analysis

A three stage analysis was proposed in this study: (1) descriptive statistics, (2) analysis of group differences (t- test), and (3) multiple regression analysis. Each statistics is presented in the following paragraphs.

Descriptive Statistics

Descriptive statistics were obtained to describe the properties of all variables involved. The frequency distribution and relative percentage of the occurrence of each level were tallied for all discrete variables (gender, graphing calculator use, years of experience, and training level), while means and standard deviations were calculated for the continuous variables (achievement scores, teacher's attitude, teaching strategy, teacher training, and teacher's perceptions) .

Analysis of Group Differences (t- test)

An independent t-test was used to compare the group means of achievement scores, teacher's attitude, teaching strategy, teacher training, and teacher's perceptions based on the use of graphing calculators (GC) in teaching Algebra I classes.

Multiple Regression Analysis

For the purpose of predicting students' achievement cores ffrom the predictor variables (teacher perceptions, teacher training, teacher attitude, strategy, gender, and years of teaching experience), multiple regression analysis was used to analyze the data by both the stepwise approach and the enter approach. The stepwise approach was conducted to ascertain what proportion of students' achievement score variance was accounted for by selected variables. A prediction equation was formulated using variables selected through the stepwise approach. Though the stepwise approach selected a significant predictor of student achievement scores, the enter approach found the variance accounted for by each independent variable regardless of its significance. A prediction equation was then formulated using the variables entered in the enter approach.

Results, Discussion and Recommendations

The focus of this section is to discuss the results of the findings and presents recommendations for future studies.

Discussion of the Results from the Descriptive Analysis

The descriptive statistics was used to analyze the data, discussion of this analysis comes under two headings: discussion of the results for frequency distribution, and discussion of the results for five continuous variables.

Discussion of the Results for Frequency Distribution

The twenty-five respondents in the teacher subject group who reported they used graphing calculators, and the 18 respondents in the teacher subject group who reported they did not use graphing calculators were included in the data analysis. The frequency count of all levels of the three discrete variables (gender, graphing calculator use, years of teaching experience, and training level), as well as their relative percentages, are displayed in Table 2.

Table (2)

Frequency counts and relative percentages by variable

		GC Use (n=25)		No GC Use (n=18)		Total (n=43)	
Category		f	%	f	%	f	%
Gender	Female	14	56	6	33.3	20	46.5
	Male	11	44	12	66.7	23	53.5
Experience (yrs)	1 - 6	9	36	4	22.2	13	30.3
	7+	16	64	14	77.8	30	69.7
Training level	1 (lowest)	4	16	4	22.2	8	18.6
	2	2	8	6	33.3	8	18.6
	3	11	44	8	44.5	19	44.2
	4	6	24	0	0	6	14.0
	5 (highest)	2	8	0	0	2	4.6

It is not able that the gender profile of the non GC group is the opposite of that of the GC group: a majority of non-users are male. Also, a sizable majority in this group perceived themselves as highly experienced. The question then arises why such an experienced group of teachers does not employ graphing calculators in the classroom. One possible answer is that they simply are not adequately experienced with this technology. As noted for the calculator-using group, the more experienced teachers began their training and careers at a time when calculators were not common or readily available in the classroom; they are thus less likely to be used to their presence than less experienced teachers, and to find them unfamiliar.

In the non use group, all of the teachers were found in the lower levels of training in graphing calculator use ; no teachers were found in the higher levels of training. There is strong evidence that teachers perceive a need for additional training --The lack of training may be another factor inhibiting these teachers' use of graphing calculators in their classes.

The low level of training exhibited by the majority of the subjects can best be explained in terms of their years of teaching experience. Of the 43 teachers in the sample, 30 had seven or more years of teaching experience; of these, 16 used graphing calculators in their classes, and 14 did not. Hand-held calculators are a recent technological innovation, becoming a part of the mathematics classroom only in the past decade (NCTM, 1989); thus, more than two third of the teachers surveyed began teaching mathematics before graphing calculators became widely known and popular. These teachers did not grow up with calculators and most likely did not experience using them during the own schooling. Consequently, if these teachers wish to use graphing calculators in their classrooms, they must learn how to use them. This conclusion is in agreement with Lamon and Sanner (1991), who recommended that preservice teachers be required to take their training before graduation. It is also to be noted in this context that Dickey and Kherlopian (1987) found that a large percentage of teachers said they did not use computers because they had received no training in their use.

Discussion of the Results for Five Continuous Variables

The means and standard deviations of teachers who use GC were found in Table 3. The dependent variable (achievement scores) and the independent variables (teacher's attitude, teaching strategy, teacher training and teacher's perceptions) are shown. The analysis shows positive mean scores for all the variables. The teachers surveyed showed a mean attitude score of 58.76, representing a positive attitude toward calculator use in the classroom. This finding is consistent with Alexander (1993), Vazquez (1991), Thomasson (1993), and Stiles (1995). Hembree and Dessart (1986) found that use of graphing calculators for instruction and testing improves attitudes of students and teachers toward mathematics. When calculators were used, students and teachers were more confident and enthusiastic about solving mathematics problems. The results of the present study appear to be in agreement with these findings from the teachers' perspective.

Table (3)
Means and standard deviations of the continuous variables (n=25)

		GC Use (n=25)		No GC Use (n=18)	
Variable		Mean	SD	Mean	SD
Dependent Variable	Achievement Score	66.71^a	9.55	62.59^a	10.47
Independent Variables	Attitude	58.76^b	7.60	53.94^b	8.35
	Strategy	12.96^c	1.35	13.35^c	1.17
	Perceptions	34.26^d	9.20	28.22	9.85
	Training	6.65^e	1.56	5.83^e	1.54

Maximum grade for a=100, b=85, c=20, d=50, and e=10

As far as training was concerned, the mean score indicated that the teachers surveyed are still in need of some training in calculator use. As Dana (1994) and Phipps (1993) found, it is not technology that makes a successful learning environment, but rather it is the teacher who uses the technology that helps students to be successful. The present study also found that most of the teachers surveyed had moderately positive perceptions of calculator use.

Table (4)
Methods used to learn graphing calculators, by percent of responses

	GC Use (n=25)		No GC Use (n=18)		Total (n=43)	
Method	f	%	f	%	f	%
Self-taught	22	88	10	55	32	74.4
Colleagues (s)	10	40	2	11	12	27.9
ESU workshop (s)	1	4	0	0	1	2.3
Courses in higher education	3	12	2	11	5	11.6
Workshops in higher education	7	28	2	11	9	20.9
Conferences	8	32	5	27	13	30.2
Others	2	8	2	11	4	9.3

Question three of section two of the teacher survey asked respondents to indicate the method they employed to learn how to use graphing calculators. The data, presented in Table 4, clearly indicated that almost all of the teachers surveyed are self-taught in calculator usage. Although this can be taken as a sign that these teachers are highly motivated and strongly desire to learn about graphing calculators, the self-teaching method is not necessarily the best one. Colleagues also had a positive effect on teacher training. A total of 32% of the teachers surved said they received training in calculator use at conferences. Most conferences sponsored by the district and by NCTM focus only on the theoretical aspects of technology use; the results reported here imply that a more practical or pragmatic approach may be beneficial.

Table (5)
Preferences in learning how to use graphing calculators

	GC Use (n=25)		No GC Use (n=18)		Total (n=43)	
Method	f	%	f	%	f	%
Self-taught	14	56	5	28	19	44.2
Colleagues (s)	8	32	6	33	14	32.6
ESU workshop (s)	1	4	12	67	13	30.2
Courses in higher education	4	16	5	28	9	20.9
Workshops in higher education	8	32	6	33	14	32.6
Conferences	9	36	6	33	15	34.9
Others	6	24	1	6	7	16.3

Question four of section two of the teacher survey asked respondents to indicate how they preferred to learn to use graphing calculators. The results, shown in Table 5, indicated that the majority (55%) of those who used graphing calculators preferred the self-taught method. However, conferences (36%), colleagues (32%), and workshops (32%) were also popular responses. In light of the high level of experience exhibited by the teachers in the sample, their preference for the self-taught method, and their lack of preference for more institutionalized learning, may perhaps be explained in terms of a higher level of self-confidence as a result of their many years of teaching experience. More research will be necessary before this question can be given a definitive answered.

Responses made to question 4 of section two on the survey among teachers in the non use group were reported in table 5. Most respondents indicated that they preferred to learn calculator use in ESU workshops. Conferences, colleagues , and workshops in higher -education were each given as responses by 33% of this group. Only 28% indicated they preferred to learn graphing calculator use their own, in contrast to the teachers in the calculator using group, the majority (56%) of whom preferred the self-taught method. It is of interest that the non use group showed a marked preference for learning about graphing calculators through formal channels, where the using group preferred informal methods such as self-teaching or colleagues.

In summary, the descriptive analysis of the data shows nothing particularly surprising. Results are consistent with the findings of previous researchers in this field. The most significant finding is the low level of training perceived by most of the teachers responding to the survey. Few of the Algebra I teachers can be considered experts in the use of graphing calculators. Most are self-taught, and only a few have taken any formal training in GC use. The non use group showed a marked preference for learning about graphing calculators through formal channels, where the using group preferred informal methods such as self-teaching or colleagues.

Discussion of the Results Related to Question 1

The simple correlation coefficients between all pairs of variables were calculated accordingly, and are displayed in Table 6.

Table (6)
Simple correlation matrix for dependent and independent variables.
(n=43)

Variable	2	3	4	5	6	7
1. Perceptions	.31	.54**	.21	-.20	-.23	.07
2. Training	1.00	.40*	.14	.02	.02	.31
3. Attitude		1.00	.37	.12	.09	.02
4. Strategy			1.00	.03	-.43*	.14
5. Gender				1.00	.26	.14
6. Experience					1.00	.00
7. Achievement						1.00

* Significant Level (0.05) ** Significant Level (0.01)

According to the correlation matrix shown in Table 6, there was a significant positive correlation between teacher perception and teacher attitude (r=.54), and between teacher training and teacher attitude (r=.40) at P< .05 level. This finding means that teachers who have a high positive attitude toward the use of graphing calculators also have high positive perceptions(value) and high levels of training. The variables of strategy and experience have a significantly negative correlation (r=- .43), meaning that teachers of high experience have used few strategies. On the other side, teachers of low experience have used much combination of strategies.

Discussion of Results from Multiple Regression Analysis–Stepwise Approach

The teacher training factor was entered into the regression equation because of its relative empirical importance. Table 7 displays the multiple R, R squared, R squared change, and standard error obtained on the stepwise multiple regression analysis.

Table (7)
Results of stepwise multiple regression analysis using six variables as predictors.
(n=25)

Step	Variable	Multiple R	R^2	R Squared Change	Standard Error
1	Training	.304	.092	.092	.304

Table (8)
The B value and Beta weight obtained in the prediction equation using the training variable as predictor.(n=25)

Variable	B	Beta
Training	1.814	.304
Constant	56.532	

The results of the stepwise regression analysis showed that, of the six variables (value, training, attitude, strategy, gender, and experience), only training was significant. Approximately, 30% of the variance in achievement scores was accounted for by teacher training. This finding means that teachers with a high level of training tend to have students with high achievement scores. Also, training may be a good predictor of student achievement scores. A similar correlation was found by Ichrom (1993), who observed that teachers and students who received special training had significantly higher achievement levels than those who had not. Further more the results of this finding also supports Devantier (1993).

The stepwise regression failed to explain the variance accounted for by the other variables. In particular, gender and experience were found to have no explanatory value, in agreement with Dinkheller's (1994) results. On the other hand, Dunham (1990) found that females tended to have higher levels of achievement when using graphing calculators than male teachers and students. Other researchers, such as Vazquez (1991), Thomasson (1993), and Stiles (1995), found relationships between achievement and teacher perceptions, as well as between achievement and teacher attitudes. These results are contrary to the findings of the current study. Oster (1995), in agreement with the present study, found no significant relationship between student achievement and teaching strategy.

According to the stepwise regression, the prediction equation was formulated using the significant variable, as follows: Achievement Score = (1.814) Training + 56.532.

Each student's achievement score was a function of the amount of teacher training in the use of graphing calculators. The predicted student achievement score can be obtained by using just the scores of the independent variable (teacher training).

Discussion of Results from Multiple Regression Analysis--Enter Approach

Because the stepwise regression found significance only for the training variable, the enter approach (Pedhazur, 1982) was used to find the effects, if any, of the other variables. According to the data in Table 9, the most important variable is still training; however, small effects were observed for strategy and for gender, but these effects were not statistically significant. Very little or no importance was found for value, attitude, or experience.

Table (9)
Results of multiple regression analysis (enter approach)using six variables as predictors (n= 25)

Step	Variable	Multiple R	R^2	R Squared Change	Standard Error
1	Value	.066	.004	.004	7.910
2	Training	.305	.093	.089	7.719
3	Attitude	.324	.105	.012	7.849
4	Strategy	.355	.126	.021	7.946
5	Gender	.392	.154	.028	8.022
6	Experience	.398	.159	.005	8.219

Table (10)
The B value and Beta weight obtained in the prediction equation using all the independent variables as predictors (n=25)

Variable	B	Beta
Perception (value)	0.074	0.128
Training	2.071	0.347
Attitude	-.433	-.291
Strategy	1.107	0.208
Gender	2.505	0.164
Experience	0.593	0.087
Constant	54.977	

The data in Table 10 show the B value and Beta weight derived from the variables entered. Using the enter approach, all the variables, whether significant or not, were factored into the prediction equation, which then reads as follows:

Achievement = .074 (Value) + 2.071 (Training) - .433 (Attitude) + 1.107 (Strategy) + 2.505 (Gender) + .593 (Experience) + 54.977

Each student's Achievement Score was a function of the teachers' perceptions(value), amount of teacher training in the use of graphing calculators, teachers' attitude, preferred teaching strategy, gender, and years of teaching experience. The predicted student achievement score can be obtained by using the scores of the independent variables (teachers' perceptions, teacher training, teacher attitude, preferred teaching strategy, teacher's gender, and years of teaching experience.

In conclusion, a significant relationship ($r = .31$) was found between secondary-school mathematics teachers' amount of training in the use of graphing calculators and the achievement scores of students enrolled in Algebra I course where graphing calculators were used. This finding is consistent with Ichrom (1993) and Devantier (1993). No significant relationships were found between achievement and teachers' years of teaching experience, preferred teaching strategy, attitudes toward calculator use, or gender. These findings are in agreement with those of Dinkheller (1994), but contradict those of Durham (1990), Vazquez (1991), Thomasson (1993), and Stiles (1995).

Discussion of the Results Related to Question 2

This section of the study was devoted to comparing the two groups of teachers surveyed: those who used graphing calculators in their classes, and those who did not. Tables 11,12,13, and 14 showed the results of the t- test on attitude, training, Teachers' Perceptions (value), and strategy by using usage group.

Table (11)
Summary of independent t-test on attitude scores by usage group

Attitude	n	Mean	SD	t-value	prob.
Use	25	61.84	5.21	3.74	0.001*
Don't Use	16	53.94	8.35		
Missing	2				

* *significant at $p < 0.05$ level*

Table (12)

Summary of independent t-test on training scores by usage group

Training	n	Mean	SD	t-value	prob.
Use	25	7.25	1.30	3.24	0.002*
Don't Use	18	5.83	1.54		

* *significant at the $p < 0.05$ level*

Table (13)

Summary of independent t-test on perceptions scores, by usage group

Value	n	Mean	SD	t-value	prob.
Use	25	38.60	5.694	4.36	0.00*
Don't Use	18	28.22	9.849		

* *significant at the $p < 0.05$ level*

Table (14)

Summary of independent t-test on strategy scores by usage group

Strategy	n	Mean	SD	t-value	prob.
Use	25	12.96	1.457	-.93	0.360
Don't Use	17	13.35	1.169		

The general findings of the present study, as shown in Tables 11, 12,13, and 14, were that those teachers who used calculators appear to have better attitudes, a higher level of training, and better perceptions(value) than those who did not. These findings are consistent with those of Vazquez (1991), Rich (1991), Paschal (1995), Bitter (1993), Martin (1994), Ottinger (1994), Devantier (1993), Chandler (1993), Giamati (1991), Oster (1995), Kennedy (1994), Stiles (1995), and Dion (1990).

No significant difference was found between the groups for the teaching strategy variable. Coston (1995), however, found a significant difference for the type of teaching strategy used with graphing calculators and student achievement. This lack of agreement points to a need for further research on this issue.

It follows logically that those who use graphing calculators will tend to be more highly trained in their use, particularly if they are self-taught in calculator usage. It also makes sense that such users would tend to have better attitudes toward calculators, and more positive perceptions of their value. And unexpected result of this research was the lack of a significant difference between the two usage groups for preferred teaching strategy.

Because the mean of the teachers who did not use graphing calculators (M = 13.35) is greater than the mean for those who did (M = 12.96) for this variable, it is possible that those in the calculator use group may have concentrated on a single teaching strategy, whereas those in the non-use group may have employed a combination of strategies. Given this possibility, more research will need to be done to determine the exact relationship, if any, between calculator usage and teaching strategy.

Discussion of the Results Related to Question 3

This section of the study was devoted to a comparison between those teachers who use graphing calculators in the classroom and those who do not in regards to the achievement scores of their students. The success of any educational program may be measured by the achievements of its students. Thus, the answers to this question are of the highest importance if educators are to decide whether or not to incorporate graphing calculator technology into their classroom teaching.

Table (15)
Summary of independent t-test on achievement scores by usage group

Achievement	n	Mean	SD	t-value	prob.
Use	25	69.67	7.76	2.55	0.015*
Don't Use	18	62.59	10.47		

* *significant at $p < 0.05$ level*

As shown in Table 15, there is a significant difference in student achievement scores between the two usage groups, such that the teachers who used graphing calculators in the classroom tended to have students with higher achievement scores than teachers who did not at $p < .015$ level. This finding is consistent with a number of other studies, including those of Alexander (1993), Dunham (1991), Ruthven (1990), Dinkheller (1994), Scott (1995), Army (1991), and Thomasson (1993).

The finding that student achievement is related to calculator use in the classroom is a major result of the present study. On the basis of this finding, as well as the other findings reported herein, a number of recommendations can be made regarding graphing calculators and high school mathematics education.

Summary

Through the use of a survey, this study found that many teachers who employ graphing calculators in teaching high school algebra have not been adequately trained in their use, and have often had to resort to training themselves, since other ways of learning how to use calculators are sometimes not available. There appears to be little organized teacher training in this field, as revealed by teachers' dependence on self-learning. Teacher conferences do not seem to be helping very much in this regard, since not many teachers mention learning about graphing calculators in this environment. Colleagues are helpful, however, and many teachers mention their assistance in learning how to use calculators. It is of interest that the non use group showed a marked preference for learning about graphing calculators through formal channels, where the using group preferred informal methods such as self-teaching or colleagues.

Use of graphing calculators in the classroom is also found to have a significant effect upon teachers' level of training, value, and attitudes. Instructional strategy, on the other hand, was not significant. These effects then show up in students' achievement scores. Calculator use appears to make teachers more effective, which in turn makes students learn more.

In conclusion, this study shows a positive effect for the use of graphing calculators in the Algebra I classroom. Calculator use has a positive effect on teachers' attitudes, training, and perceptions, and also on student achievement. There is every reason to believe that the findings of this study could be applied in Jordan. Jordanian schools are in the beginning stages of including graphing calculators in mathematics instruction. By observing how such instructional technologies are used in classrooms in the United States, Jordanian educators can benefit from the experiences of their American colleagues and so accelerate the process of incorporating the graphing calculator into the Jordanian mathematics classroom.

RECOMMENDATIONS

In light of the results of this study, the following recommendations are made to educators , administrators, and curriculum designers.

1. Teachers should be encouraged to use graphing calculators in their classrooms. Such use appears to have a positive effect on student achievement in high-school mathematics courses.

2. Teacher training in mathematics education should include graphing calculator usage throughout the program, so that future teachers experience and learn appropriate use of graphing calculators.

3. Preservice mathematics teachers should experience learning mathematics using graphing calculators.
4. Teaching strategies should be explored to maximize students' learning of mathematics using the graphing calculator as an instructional tool.

5. Inservice teachers should have a variety of opportunities to receive graphing calculator training and to develop innovative methods of instruction. Higher education, professional organizations, and staff development are a few examples of opportunities for learning that should be available to faculty.

References

Adams, T.L. (1994). Graphing function problems in teaching algebra. Florida Educational Research Council, Inc, Florida, Sanibel.(ERIC Document Reproduction Service No. ED 372942).

Alexander, M. P. (1993). The effective use of computers and graphing calculators in college algebra. Dissertation Abstracts International, 54(6) 2080A.

Army, P. D. (1991). An approach to teaching a college course in trigonometry using applications and graphing calculator. Dissertation Abstracts International, 52(8) 2850A.

Bell, F. H. (1978). Teaching and Learning Mathematics (In Secondary Schools). Wm. C. Brown Company Publishers, Dubuque, Iowa.

Bitter, G. G. (1980). Calculator Teacher Attitudes Improved through Inservice Education. School Science and Mathematics. 80(4), P 323-26.

Bitter, G. G., & Hatfield, M. M. (1993). Integration of the Math Explorer calculator into the mathematics curriculum: The calculator project report. Journal of Computers in Mathematics and Science Teaching, 12(1), 59-81.

Bright, G., Waxman, H., & Williams, S. (1994). Impact of Calculators on Mathematics Instruction. University Press of America, inc. Boston, way.

Chandler, P. A. (1993). The effect of the graphing calculator on high school students' mathematical achievement. Dissertation Abstracts International, 53(11) 3832A.

Clarke, D. (1994). Ten Key Principles from Research for the Professional Development of Mathematics Teachers. In D. B. Aichele & A. F. Oxford (Eds.) Professional Development for Teachers of Mathematics (37-54). National Council of Teachers of Mathematics(NCTM),Inc., Reston, Verginia.

Coston, Y. M. (1995). The effects of graphics calculator enhanced instruction and cooperative learning on college algebra students' understanding of the function concept, achievement of algebraic skills, and attitudes toward mathematics. Dissertation Abstracts International, 55(8) 2310 A.

Currence, A. J. (1993). A descriptive study of instructional delivery systems for mathematics teachers related to the graphing calculator. Dissertation Abstract International, 53 (11), 3832 A.

Dana, A. S. (1994). Integrating technology into the classroom: Description of a successful first grade teacher. Dissertation Abstract International, 54 (8), 1992 A.

Demana, F. & Waits, B. (1990). Enhancing mathematics teaching and learning hrough technology. In T. Cooney (Ed.) Teaching and learning mathematics in190s(212-222). National Council of Teachers of Mathematics(NCTM),Inc., Reston, Verginia.

Devantier, A. T. (1993). The impact of graphing calculators on understanding of functions and their graphs. Dissertation Abstracts International, 53(2) 535A.

Dickey, E. and Kherlopian, R. (1987). A survey of teachers of mathematics science and computer on the uses of computers in grade 5-9 classrooms. Educational Technology, 10-14.

Dinkheller, A. L. (1994). Graphing calculators in precalculus: Gender, Anxiety, And achievement. Dissertation Abstract International, 54(11) 4020A.

Dion, G. (1990). The graphics calculator: A tool for Critical thinking. Mathematics Teacher,83(7) p (564-571).

Dunham, P. H. (1990). Mathematical confidence and performance in technology-enhanced precalculus: Gender-related differences. Dissertation Abstract International, 52, 3353A.

Enoc, D. S. (1994). The impact of inservice Training teachers' confidence and students' mathematics achievement. Dissertation Abstracts International, 4(9), 3352 A.

Enringer, M. (1994). Student scores soar with Graphing Calculators. Technology in Mathematics Education, 6(1), p8.

Emese, G. L. (1993). The effects of guided discovery style teaching and graphing calculator use in differential calculus. Dissertation Abstract International, 54(2) 450A.

Fey, J. (1989). School algebra for year 2000. In C. Kieran & S. Wanger (Eds.) Research issues in learning and teaching algebra (199-213). National Council of Teachers of Mathematics(NCTM),Inc., Reston, Verginia.

Giamati, C. A. (1991). The effect of graphing calculator use on student understanding of variations on a family of equations and the transformations of their graphs (calculators). (Doctoral dissertation, University of Michigin, (1990). Dissertation Abstracts International, 52(1)103A.

Hall, M. K. (1993). Impact of graphing calculator on the instruction of trigonometric function in precalculus classes. Dissertation Abstracts International, 54(2) 451A.

Hembree, R., & Desssart, D. (1986). Effects of hand-held calculators in precollege mathematics education: A meta-analysis. Journal for research in mathematics education. 2, 83-99.

Inchrom (1993). Teacher training and teacher student achievement. Dissertation Abstracts International, 54 (2), 488 A.

Kennedy, P. (1994). The Graphing Calculator in pre-Algebra Courses: Research and practice. In Bright, G. W.; Waxman, H.C.; and Williams, S. E. (Eds). Impact of Calculators on Mathematics Instruction (79-90). University press of America, Inc., Lanham, Maryland.

Lamon, W. E. & Sanner, J. W. (1991). Evaluating the Use of Microcomputer in Oregon Secondary Schools: The Perceptions of the Department Head. Oregon Department of Education, Salem, Oregon.(ERIC Document Reproduction Service No. ED 348956).

Litchtenberg, D. (1988). Summary of the report of the NCTM-MAA task force on the mathematics curriculum for grades 11-13. Mathematics Teacher, 81(6), 442-443.

Martin, W. O. (1994). Lasting effects of the integrated use of graphing technologies in precalculus mathematics. Dissertation Abstracts International, 54 (10) 3694A.

May, C. M. (1994). Factors effecting the integration of graphing calculator technology in the secondary precalculus classroom: attitudes, teacher training, and curriculum issues. Dissertation Abstracts International, 55(10) 3127A.

National Council of Teachers of Mathematics(NCTM).(1961). Careers in Mathematics. NCTM, Inc., Washington, D.C.

National Council of Teachers of Mathematics(NCTM).(1967). In- Service Education in Elementary School Mathematics. NCTM, Inc., Washington, D.C.

National Council of Teachers of Mathematics (NCTM). (1989). Curriculum and Evaluation Standards for School Mathematics. Reston, VA: The Council.

National Council of Teachers of Mathematics (NCTM). (1995). Assessment Standards for School Mathematics. Reston, VA: The Council.

National Council of Teachers of Mathematics (NCTM). (1988). The Ideas of Algebra, K-12 (YearBook). Reston, VA: The Council.

Norris, C. W. (1995). The impact of using graphic calculators as an aid for the teaching and learning of precalculus in a university setting. Dissertation Abstracts International, 55(7) 1862A.

Oster, J. E. (1995). Graphics technology and calculus readines: the effects of instruction using a programmable scientific graphing calculator on conceptual and procedural understanding in precalculus. Dissertation Abstracts International, 55(11) 3466A.

Ottinger, T. P. (1994). Conceptual and procedural learning in first-year algebra using graphing calculators and computers. Dissertation Abstracts International, 54(8) 2934A.

Paschal, S. G. (1995). Effects of a visualization enhanced course in college algebra using graphing calculators and video tapes. Dissertation Abstracts International, 55(9) 2754A.

Pedhazer, E. J. (1982). Multiple Regression in Behavioral Research: Explanation and Prediction. Harcourt Brace Jovanovich, Inc, Fort Worth, Texas.

Phipps, P. A. (1993). Professional development perceptions of early childhood administrators toward their teachers' inservice training. Dissertation Abstracts International,53 (11), 3793 A.

Rich, B. S. (1991). The effect of the use of graphing calculators on the learning of function concepts in precalculus mathematics. Dissertation Abstracts International, 52(3), 835A.

Ruthven, K. (1990). The influence of graphic calculator use on translation from graphic to symbolic forms. Educational Studies in Mathematics, 21, 431-450.

Scott, B. A. (1995). The effect graphing calculators in Algebra II classrooms: a study comparing achievement, attitude, and confidence. Dissertation Abstracts International, 55(9) 2755A.

Stiles, N. L. (1995). Graphing calculators and calculus. Dissertation Abstracts International, 55(11) 4888A.

Strait, G. J. (1993). A comparison of inductive and deductive teaching strategies utilizing graphing calculator capabilities. Dissertation Abstracts International, 54(4) 1261A.

Suydam, Marilyn N. (1982). The use of calculators in precollege Education: Fifth State of the Art Review. Columbus, Ohio: Calculator Information Center. (ERIC Document Reproduction Service No. ED 220273).

Thomasson, S. J. (1993). The effects of the graphing calculator on the achievement and attitude of college students enrolled in elementary algebra. Dissertation Abstracts International, 53(11) 3835A.

Tolias, G. (1993). The effects of using graphing technology in college precalculus. Dissertation Abstracts International, 54(4), 1274A.

Trotter, A. (1991). Graphing Calculators are Coming to Class. The Executive Educator, 13, 20.

Tuska, A. (1993). Students' errors in graphing calculator-based precalculus classes. Dissertation Abstracts International, 53(8) 2725A.

Upshaw, J. T. (1994). The effect of the calculator-based, graph- exploration method of instruction on Advanced Placement Calculus achievement. Dissertation Abstracts International, 54(11) 4022A.

Vacc, N. N. & Bright, G. W.(1994). Changing Preservice Teacher-Education Programs. In D. B. Aichele & A. F. Oxford (Eds.) Professional Development for Teachers of Mathematics (37-54). National Council of Teachers of Mathematics(NCTM),Inc., Reston, Verginia.

Vazquez, J. L. (1991). The effect of the calculator on student achievement in graphing linear functions. Dissertation Abstracts International, 51(11) 3660A.

Waits, B. , & Demana, F. (1989). Computers and the rational root theorem- another view. Mathematics Teacher, 82, 124-125.

Walter, R. , & Meredith D. (1989). Educational Research, Longman Inc.,White Plains, N. Y.

THE EFFECTIVENESS OF ACQUISITION OF TEACHING COMPETENCIES IN THE PROGRAM OF PRACTICAL EDUCATION AMONG THE TEACHER STUDENTS IN THE UNIVERSITY OF JORDAN

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INTRODUCTION

The University of Jordan has taken upon shoulder since 1962 (the year of its establishment) the service of Jordan society and its scientific, cultural and social institutions, this because it is the first and master University in Jordan. The University established faculty of educational sciences in 1973/1974 in order to provide local society with teaching competencies for ministry of education. The University responded to the direction of educational conference concerning preparation and qualification of the teachers preservice and inservice, so the University created new specializations as class teacher and field teacher (Arabic Language, English Language, Science, Mathematics, Islamic Education, Social studies and career education). The students is given degree of bachelor after fulfilling the requirements of specialization. The program of practical education which has been founded since 1993 has (9) credit hours (Three theoritical hours and six practical hours). This program is supervised by qualified cadre of trainers and teachers and it aims at:

1) Giving the students of faculty of educational sciences chances for training preservice in different specializations in order to acquire them required teaching competencies for future work after graduation.
2) Giving the students a chance for making aware of reality of educational institution in Jordan.
3) Creating positive attitudes toward the profession of teaching because of its scientific and moral importance in creating aware and distinctive generalization.
4) Constructing trust and contact between University and Ministry of Education.
5) Making researchs in the field of preparation and training of the teachers.
6) Implementing concepts and theories practically in the field.

Because of diversity of the variables that probably have effects on acquisition of teacher students for teaching competencies as gender, cumulative average, major, the place of training, the method of training, supervisor and teacher.. et al). This study came to evaluate the effectiveness of practical education program in the University of Jordan and to determine the effect of previous variable on teacher students' acquisition of teaching competencies.

Statement of the Problem

The purpose of conducing is to determine the effectiveness of practical education program in faculty of educational sciences in the University of Jordan in teacher students' acquisition of teaching competencies and investigating the effect of teacher student gender (male, female), place of training (public school, private school), major (class teacher, field teacher) and cumulative average (less than 67, (67-75), more than

75) on teacher students' acquisition of teaching competencies. This study particularly, attempted to answer the following questions:

1) What is the effectiveness of practical education program in teacher students' acquisition of main teaching competencies from their points of view in the following fields (planning for teaching, student knowledge of teaching material, activities and methods, teaching activities, classroom management, and evaluation)?
2) What is the effect of Gender, place of training, major and cumulative average on acquisition of elementary teaching competencies in all fields?

Definition of Terms

Teaching competencies: A group of abilities that the teacher student has to have. These abilities include knowledge, skills and attitudes whereby the student practice teaching efficiently. The competencies in this study were presented in the items of questionnaire.

Acquisition of teaching competencies: Possession of teaching competencies by the teacher students in all their elements : cognitive, skillful and attitudinal. The acquisition was measured by the tool of this study.

Teacher student: A student in the faculty of educational sciences enrolled in course of practical education.

Practical education: The process whereby the teacher student is trained teaching in voluntary schools under the supervision of cadre of practical education.

Sample

The tool of the study was distributed the population of study (N=197) teacher students in voluntary schools in the last week of field training. The number of returned back questionnaires is equal to (137), so the number of samples subjects is the number of teacher students who responded the questionnaire and their number is equal to (137) students, table (1) illustrates distribution of the sample over four independent variables.

Table (1)
Distribution of Samples Subjects over four independent variables

Variables	Level	Number	Total
Gender	Male	46	137
	Female	91	
Place of Training	Public school	83	137
	Private school	54	
Cumulative Average	Less than 67	24	137
	(67-75)	82	
	More than (75)	31	
	Class teacher	38	
	Field teacher/Arabic Language	17	
Major	F.T./English Language	12	
	F.T./ Science	10	
	F.T./Mathematics	15	137
	F.T./Islamic education	9	
	F.T./Social education	36	

The Questionnaire

To develop a questionnaire for teaching competencies of teacher students. The researchers depended on the scales and questionnaires included in the literature. These scales are:

1) The list of elementary teaching competencies for the teachers of elementary schools in Jordan. This list was prepared by Marei' (1981).
2) The list of teaching competencies for teacher students in Yamen. This list was developed by Al-Farra and Himran (1994).
3) The list of teaching competencies for teacher students in Kuwait. This list was developed by Al hashel and Moh'd (1990).
4) The list of teaching competencies for the teacher of geography in secondary stage in South Yamen. This list was developed by Albothani (1994)
5) Evaluation list for the practices of the teachers of history in Second Literary Secondary grade. This list was developed by Aby Osba, (1996).
6) Evaluation list for teacher efficiency, this list was developed by Alqaseer (1996).
7) List for measuring the classroom the classroom teaching practices for the teachers of mathematics for tenth elementary grade in Jordan. This list was developed by Alahmed (1993).

Based on these lists, the list of this study was developed to evaluate the teaching competencies for teacher students. These competencies were.distributed over the six following fields: planning for teaching, students' knowledge for teaching material, activities and methods, teaching activities, classroom management, and evaluation.

Validity

The teaching competencies questionnaire was validated by (15) university faculties from the faculty of Educational Sciences in the University of Jordan and Yarmouk University. They were asked to give their opinions in the correlation of competency to the field where included, clearance of its idea, the correlation of the fields to the tool and any propositions for cancellation, Modification or addition. The necessary modifications were made based on arbitrators' opinions, so it was proved that the list attains the object for which it was put, after these modifications, the researchers reached to the final list consisted of (43) items representing teaching competencies. The items are responded based on likert scale. The respons of acquisition of competencies ranged from very high to very low.

The questionnaire in its final form - consisted of two parts:

1) **Part one:** This part included: definition of teaching competencies, instructions of responses, information about the subjects of population as gender, place of training, cumulative average and major.
2) **Part two:** This part included the items of questionnaire, whose total number is (43) items distributed over six fields. Table (2) illustrates the fields of teaching competencies.

Table (2)
The fields of teaching competencies

No.	Field	The No. of items
1.	Planning for teaching	8
2.	Student knowledge of material	5
3.	Activities & Methods	12
4.	Teaching & Methods	6
5.	Classroom management	5
6.	Evaluations	6
Total		43

Reliability

Reliability of the questionnaire was tested by two ways:

1) **Test - rest reliability:** The tool was administered to a sample consisted of (15) male and female teacher students who don't belong to the sample of study. After two weeks, the tools was also administered, then the correlation coefficient was calculated, and it was (0.82) reliability coefficient.
2) **Internal - consistency:** According to the Internal Consistency a reliability coefficient (0.93) was found using cronbach's Alpha method.

RESEARCH DESIGN

This study is expermental research desing. Descriptive statistics and inferntial statistics analyses were used to determine the effectiveness of independent variables:

1) Gender (Male and Female).
2) The place of training (public school, private school).
3) Cumulative average (less than 67, 67-75) more than 75).
4) Major (class teacher, field teacher (Arabic Language, English Language, Science, Mathematics, Islamic education and social studies, and the department variable) (The effectiveness of teacher students acquisition of teaching competencies.

Statistical Analysis

To answer the questions of this study: A three stage analysis was proposed in this study:

1) Descriptive statistics: Means, standard devitations, and percentage were obtained ot determine the degree of teacher students acquisition of teaching competencies mall fields (to answer the first question).
2) Infereritial statistics: to answer the second question one-way analysis of variance, multiple-way analysis of variance and Hoe-comparisons (Newman-Kuels) to explore whether there were significant effects of independent variables on teacher students' acquisition of teaching competencies in all fields.

Review of Literature

Because of the importance of practical education and its effect on burnishing the personality of teacher student and his acquisition of teaching skills and competencies that guarantee the success in teaching in the future. So the practical education was the focus of interest of many researchers.

Akpe, (1987) studied the program of preparation of elementary schools teachers in Nigeria, this study explored the opinions of (162) graduates (106) male and female students and (51) male and female principals. The results of study revealed that many subjects of the samples agreed that the program contributed in acquiring the teacher students the training skills.

Brogdon, (1978) studied the teaching competencies that the teacher in the course of preparation of middle school teacher has to acquire: this study was carried out in Albahma state. The sample of study consisted of (325) teacher students. A list containing (18) teaching competencies awas administered to them. The results revealed that the teacher students had supported (13) competencies in very high degree and (5) ones in high degree.

Suweilim (1980) made a study aiming at determine the teaching competencies include in the program of insitute of educational qualification in Jordan. So this program was directed to prepare the teacher of mathematics in elementary stage. The sample consisted of two groups, that is the first one contained (244) male and female teachers, while the second one-which was a subgroup of the first-contained male and female teachers, so it was called the sample of practical criterion. The results of study indicated the trainees had acquired the competencies of qualification program moderately, and there was 11% of graduates are still need for field followup. No significant differences were found between the imagination of teachers and their performance on the competencies.

Jaber and Sallam (1985) carried out a study aiming at determine the expectations of teacher students about the program of practical education in University of Qatar bu explorating the opinions of (47) male and female students, the results indicated that the program contributed in acquiring the teacher students the competencies concerning lesson progress and using teaching technology. The results also revealed that the relationship of teacher student with the supervisor was good.

Abu Hilal (1980) made an experimental study aiming at test the effect of practical education on teaching behavior among teacher students. The sample of study consisted of (40) male and female students. They were randomly assigned to two equivalant groups: experimental group was trained on the course of practical education and control group was trained on alternative course, the results revealed that practical education had clear effect on improvement of teaching behavior among the teacher students.

Marei (1981) studied teaching competencies for the teacher of elementary school in Jordan in the light of system analysis and estimation of the extent of teachers, acquisition of the competencies and the effect of supervision authority, sex and the type of preparation on the necessity of competency and the degree of its practice. The sample consisted of (467) male and female teachers representing 30% of the size of study population, the subjects were distributed over eight sets based on the supervision authority, sex and the type of preparation preservice and inservice. The results of study revealed that there were significant differences in practicing teaching competences

677

between female teachers of Agency of international relief(*) and the teachers of public schools.

Badran and Aldeeb (1980) carried out study aiming at evaluating the program of preparation of teachers in department of education of teachers in department of education in University of Kuwait by exploring the opinions of (341) graduates, (67) male and female principals and (81) male and female supervisors. The results indicated that the course of practical education contributed in high degree-in acquiring the graduates the teaching practices and constructing good relationships with pupils, administration and collegues.

Results and Discussion

This part includes the results and their discussion. The results represent answering the two questions of study:

1) What is the efficiancy of practical education program in University of Jordan in acquiring the teacher students teaching competencies from their points view in the six fields?
2) What is the effect of gender, place of training, major and camulative average on acquisition of teaching competencies in all fields?

Discussion the results related to question 1.

Table (3)
Means, standard deviations and the percentage of scores of student teachers acquisition of teaching competencies concerning the planning for teaching

No. of item	Item	Mean	Standard deviation	Percentages
8.	Implying daily plan the behavioral teaching objectives and activities that help to achieve, and evaluation	4.40	0.64	88%
7.	Preparing daily plan leading to simplify teaching among pupils	4.25	0.72	85%
2.	Fomulating instructional objectives behaviorally	4.02	0.77	80%
1.	Defining pre learning requiring for acquiring the new concept	3.99	0.81	80%
5.	Relating behavioral instructional objectives to the rest of elements of classroom teaching situation: the content of material, activities and evaluation.	3.96	0.80	79%
3.	Formulating behavioral instructional objectives that must contain the three learning fields: cognitive (knowledges, concepts and mental operations), Emotional (attitudes and values) and psychomotor (skills)	3.77	0.89	75%
4.	Relating behavioral insturctional objectives to instructional and educational needs of pupils.	3.75	0.76	75%
6.	Preparing year plan to organize the teaching of material content.	2.66	1.20	53%

(*) (UNRWA) = Agency of intenn. relief

Table (3) indicates that students teachers, estimations for the most of teaching competencies conecting the field of planning for teaching were high, that is, the competency (8) stated as implying daily plan the behavioral teaching objectives and activities that help to achieve and evaluation - got the highest mean = 4.40 and percentage = 88%. The competency (7) came in the second rank in mean = (4.25) and percentage = 85%. These results indicated that the student teacher had acquired instructional competencies concerning daily planning by courses of teaching methods and practical education (Theoritical part). Daily planning for lessons are followed contineously by educational supervisor and cooperator teacher in the University.

Table (3) also indicated that competency (6) concerning the preparing year plan to organize the learning of material content came in the last rank in mean = (2.66) and percentage (=53%). This low estimation that the teacher students gave this competency refers to the courses of teaching methods in the faculty don't take year planning into consideration as daily planning. Inaddition to the interval of practical education for these teacher student completed in second semester 95/1996. The preparation of year plan is often in the beginning of the first semester. So the teacher student, hadn't any enough chances for training on preparing year plan under the supervision and direction of cooperator teacher and educational supervisor in the university.

Table (4)

Means, standard deviations and the percentages of scores of teachers students' acquisition of teaching competencies concerning the field of his knowledge of teaching material

No. of item	Item	Mean	Standard deviation	Percentages
9.	Understanding instructional material, namely recognition of relationships between the parts of this material and applying the mental processes to them simply.	4.24	0.66	89%
12.	Enrichment of scientific material included in the textbook objectively, by trainings, activities, questions and scientific references.	4.08	0.77	82%
11.	Organizing presentation of teaching material sequently and logically (realities, concepts principles, generalizations) and psychologically (from simple to difficult from whole to part, from know to unkown and from tangible to abstract).	3.92	0.86	78%
13.	Benfeting from current events and from what is getting of progress in the field of knowledge inorder to improve the learning of pupils.	3.81	0.97	76%
10.	Analysizing the content of instuctional content to realities, values, attitudes, and skills that must take logic connection into consideration between their components.	3.96	0.91	74%

Table (4) indicates that competences (9) is the most in acquisition according to estimations of teacher students, that is, it get a mean (4.24) and percentage (85%).

Competency (12) came in the second rank with mean = 4.08 and percentage (82%). These results refer to that the academic courses in the program of teacher student preparation preservice assisted to acquie them the knowledge of courses that they teach.

Table (5)

Means, standard deviations and the percentage of scores of teachers students' acquisition of teaching competencies concerning the field of activities and methods

No. of item	Item	Mean	Standard deviation	Percentages
24.	Reinforcing the right answers of students that reflect creative, imaginative and geniune thinking	4.50	0.67	90%
23.	Respecting the individuality and opinions of every pupils and appreciating his feelings during giving his answer even if were wrong.	4.39	0.67	88%
25.	Using different methods of reinforement as compliment and praise of good work and good opinions, listening carefully and respecting the students' opinions and feelings.	4.37	0.64	87%
16.	Preparing for lesson by effective procedures to elicit pupils' motivation to teach the amterial in the beginning of each lesson.	4.29	0.69	86%
19.	Employing the textbook in classroom teaching effectively, because it is one of important resources of teaching.	4.20	0.81	84%
22.	Consideration individual differences between the pupils in the light of their interests, abilities and needs.	4.20	0.76	84%
26.	Using clear language during teaching of material.	4.08	0.73	82%
18.	Assisting pupils to learn the different skills of thinking by asking questions eliciting for thinking and methods develop thinking among them.	4.04	0.79	81%
20.	Using teaching technology for classroom teaching situation.	3.99	0.81	80%
14.	Using the modern methods in teaching as problem solving, exploration, discussion.	3.87	0.86	77%
15.	Using different strategies to organize the learning of concept by determining its characteristics and relating to the concepts that the pupils learned previously.	3.71	0.77	47%
17.	Using the methods of self-learning by the different resources of knowledge (books, technology, journals, magazines, pictures and paintings).	3.64	0.97	73%
21.	Exploiting the environmental potentials in producing teaching technology.	3.52	0.93	70%

Table (5) reveals that the estimation of teacher students acquisition of teaching competencies concerning this field came high, that is, most of them came in the first ranks of the gist. The competency (24) in the first rank with mean = (4.50) and percentage 90%. This result reflects awareness of teacher students of the importence of reinforcing the pupils, right answer and effect of that on eliciting their motivation for learning. Inaddition to the teacher students has acquired competencies concerning reinforcement and eliciting motivation by the courses included in the faculty as course of educational psychology, course of practical education (theoritical part) and the course of classroom management. Competency (21) was the least in acquisition which men = (3.25) and percentage 70% this means that the preparation of teaching technology by domestic community takes long time, inaddition to the teacher students depended on handly teaching technology and they are sometimes satisfied with available teaching technology included in textbook as pictures, painting, graphs and tables.

Table (6)
Means, standard deviations and the percentages of scores of teachers students' acquisition of teaching competencies concerning the field of teaching activities

No. of Item	Item	Mean	Standard deviation	Percentages
28.	Diversity of teaching activities done by pupils as: open discussion, making researchs, writing reports and solving excercises and problems.	3.84	0.93	77%
27.	Selection of curricular and non curricular activities for pupils increases of effectiveness of pupils teaching.	3.72	0.84	74%
30.	Selection of assignments (Homeworks) that en-rich and reinforce the subject of textbook, fit the needs of pupil, agree with their abilities and challenge their thinking.	3.68	0.93	74%
32.	Following up the pupils' performance of teaching activities inorder to conservate their motivation to the work.	3.68	0.90	74%
29.	Organizing desk work requiring thinking as suggestion of new pointsview or imagination of new solutions for the presented problems.	3.30	1.09	66%
31.	Using school library as the source of pupils learning for enriching and reinforcing this learning.	3.03	1.19	61%

Table (6) reveals that competency (28) was the most of teaching competencies in teacher students acquisition, that is, it came in the first rank with mean = (3.84) and percentage 77%. Competency (27) came in the second rank with mean = 3.72 and percentage = 74%. These results indicate that the teacher students percieved the importance of employing curricular and noncurricular activities in classroom situations, inaddition to, curricula and textbooks issued at educational development conference in Jordan had taken into consideration these activities, so this helps teachers to use them regardless of their experiences and levels, as well as the allocated time in daily and weekly program of lessons let the student practice these activities.

Table (7)

Means, standard deviations and the percentages of scores of teachers students' acquisition of teaching competencies concerning the field of classroom management

No. of item	Item	Mean	Standard deviation	Percentages
36.	Encouraging pupils to participate in dialogue and to give opinion and respect others, opinion.	4.36	0.59	87%
35.	Conservating pupils' attention and their discipline in the classroom.	4.29	0.72	86%
37.	Behaving with pupils in certain ways leading to make them keep up discipline.	4.07	0.61	81%
34.	Solving emergent problems by effective and flexible procedures.	4.06	0.76	81%
33.	Organizing physical environment for teaching situation in the classroom in away leading to occure the effective learning and benefit from teaching technology.	3.97	0.74	79%

Table (7) indicates that absolute range between the highest mean and the lowest one was slight, this range was between (4.36-3.97). The percentage ranged from 79% to 87%, the competency (36) got the highest mean and percentage, that is, the mean (4.36) and the percentage was 87%. The interpretation of these results is compatible with the former interpretation of these results is compatible with the former concerning competency (24).

Table (8)

Means, standard deviations and the percentages of scores of teachers students' acquisition concerning the field of evaluation

No. of item	Item	Mean	Standard deviation	Percentages
38.	Asking questions to test pupils' understanding as: questions of ideas deducation, questions of thinking as these of resoning, analysis, synthesis, and evaluation and retionalizational question.	4.14	0.82	83%
43.	Using feedback by the learners to improve their learning in teaching subjects, that is, the test is a teaching situation where is useful for later teaching situation.	4.05	0.81	81%
41.	Using contineous evaluation that occurs after each step and summative evaluation that occurs in the end of each teaching sistuation.	3.99	0.93	80%
39.	Using diverse evaluation methods in teaching situation as: objective test, compositional tests, observation and precision of clerical works to know attainability of objectives.	3.94	0.83	79%
40.	Training pupils' on practice evaluation of their learning in light of teaching objectives.	3.47	0.93	69%
42.	Using simple methods as: frequency distribution percentile ranks and means of raw scores.	2.88	1.20	58%

It is noticed from table (8) that absolute range between the highest mean and the lowest one was considerable, this range of means was between (2.88-41.14), the percentage also ranged from 58% to 83%. Competency (38) got of the highest mean with (4.41) and the highest percentage with 83%. This reflects students belief that the task of preparing questions and asking them is as routine practiced daily. Competency (43) came in the second rank with mean = (4.05) and percentage with (81%), this reflects the importance of feedback in late teaching situations. Competency (42) was the least in the level of acquision by teacher students, this means that the teacher students only focus on constructing achievement tests without interesting analysizing the results statistically.

Table (9)

Means, standard deviations and the percentages of scores of teachers students' acquisition according to the six fields

No. of item	Field	Mean	Standard deviation	Percentages
5.	Classroom management	4.15	0.49	83%
3.	Activities & Methods	4.06	0.46	81%
2.	Student Knowledge of teaching subject	3.94	0.60	79%
1.	Planning for teaching	3.85	0.47	77%
6.	Evaluation of pupils' learning	3.74	0.62	75%
4.	Teaching activities	3.54	0.68	71%
*	All fields	3.90	0.43	78%

Table (9) reveals that the fifth field concerning classroom management came in the first rank with mean = 4.15 and percentage = 83%. The third field concerning activities and methods came in the second rank with mean = (4.06) and percentage = 81%, while the fourth field came in the last rank with mean = 3.54 and percentage = (71%). In all fields the results showed that the mean is (3.90) and with (78%) percentage. These reflect the effectiveness of practical education program in teacher students' acquisition of teaching competencies requiring for their future work as teachers in planning for teaching pupils knowledge of teaching subjects, activities and methods, teaching activities, classroom management and evaluation.

Discussion the results related to question 2

a) The results of (ANOVA) revealed that there were no significant effects of teacher student gender on the level of acquisition in all fields. These results disagree with the results of Marie's study (1981) that emphysized that female teachers acquired teaching competencies better than male teachers, but the results of this study emphysized that both male and female student between teacher were equally acquired teaching competencies without discrimination, this means that society encourgement of women work in the field of teaching contributed in improving the prestige of women and their attitudes toward teaching and instruction.

b) The results of ANOVA revealed that there were significant effects of training place on the level of acquisition, that is, there were significant differences at (α =0.05) in the level of aquisition in the fields of classroom management and evaluation due to the place of training (public schools, private schools) in favor of public schools

(21.08) in comparison to private schools (20.26), these results were illustrated in table (10).

Table (10)
ANOVA results of the effect of training place (public schools, private schools) on acquisition level of teaching competencies in all fields

Resources of variance	Sum of squares	Mean of squares	F-value
Plainning for teaching	16.68	14.16	1.18
Pupils knowledge of subject	1.59	9.27	0.17
Activities and methods	26.15	36.04	0.73
Teaching activities	3.43	16.88	0.20
Classroom management	22.27	5.92	3.76*
Evaluation	84.05	14.28	5.89*

* Significant at ($\alpha = 0.05$)

There were significant differences -table 10- between public schools and private schools in the fields of classroom management and evaluation infavor of public schools, this due to that the teacher of public school is free in using serious methods of management and evaluation, that is the private schools pursue to satisfy pupils parents, inaddition to, the public schools have contineous supervision wether by the supervisor or the principal of schools who don't hesitate to impose strong penalties against who attempts to fail school discipline, the private school -on the other hand- give results for their pupils by using simple tests.

a) The results of ANOVA revealed that major (class teacher, field teacher) had significant effects on acquisition level of teaching competencies in the fields of (activities and methods) and (evaluation) as stated in table (11)

Table (11)
ANOVA results of effect of major (class teacher, field teacher) on acquisition level of teaching competencies in all fields

Resource of variance	Sum of squares	Mean of squares	F-value
Plainning for teaching	20.60	13.6	1.51
Pupils knowledge of subject	17.81	9.13	1.95
Activities and methods	87.57	36.49	2.40*
Teaching activities	24.20	17.21	1.41
Classroom management	4.87	6.21	0.78
Evaluation	35.55	14.34	2.48

* *Significant at ($\alpha = 0.05$)*

Post-Hoc comparisons revealed that there were significant differences at (α=0.05) between class teacher (54.74) and field teacher (science) (47.50) infavor of class teacher this is due to that the most of students enrolled in the course of class teacher have the certificate of general secondary examination (scientific stream) that makes them differentiate from their peers of field teacher specialization. In addition to class teacher students, use diverse activities and methods including tangible things, that is, their are below age of ninth), while the pupils of field teacher are above this age and Abstract things are suitable for them.

Post-Hoc-comparisons also revealed that there were significant differences of (α=0.05) between specialization of social studies (24) and science in favor of social studies and between social studies and class teacher in favor of social studies.

This is due to the evaluation of social studies uses the question of ideas deduction and diverse evaluation methods as observation, Maps, historical events and some social things where the students lives in and practices, while class teacher use almost one methods, and the field teacher use abstraction in his teaching.

(d) The results of ANOVA revealed that cumulative average (first level=less than 67, second level= 67-75 and the third level=more than 75) had significant effect on acquisition level in the field of classroom management as illustrated in table (12).

Table (12)
ANOVA results of the effect of cumulative average on acquisition level of teaching competencies in all fields

Source of variance	Sum of squares	Mean of squares	F-value
Plainning	2.26	13.60	0.17
Pupils knowledge	12.12	9.13	1.33
Activities and methods	3.33	36.49	0.09
Teaching activities	8.49	17.21	0.49
Classroom management	21.62	6.21	3.48*
Evaluation	24.55	14.34	4.71

** Significant at (α = 0.05)*

Post-Hoc comparisons revealed that there were significant differences between the first level (19.63), and the second (20.89) infavor of the second level and between the second level and the third level (21.29) in favor of third level. This is due to that there was a direct relationship between cumulative average and having methods of classroom management, that is the students of high achievement have educational and scientific knowledge and use them effectively in comparison of the students of low and middle achievement. Therefore these students because of their high achievement-always get respect and appreciation in the classroom.

(e) The results of MANOVA revealed that there were no any effects of previous independent variables on acquisition level of teaching competencies in all field together as illustrated in table (13).

Table (13)
Multiple ANOVA results of effects of independent variables in all fields

Resource of variance	Sum of squares	Degree of freedom	Mean of squares	F-value	Significance level
Gender	425.70	1	425.7	1.28	0.26
Cummulative average	379.02	2	189.51	0.57	0.56
Place of training	95.01	1	95.1	0.27	0.06
Major	4018.32	6	669.72	2.03	0.06
Error	41733.02	135			

These results emphysized that there must be diverse and comprehensive methods of training used with all pupils regardless of their gender, major, place of training and cumulative average. Therefore, this study recommended that the last variables were considerable and effective in acquisition level of teacher students of teaching competencies, but the quality of training may effect on the level of acquisition. The study also recommended to make studies about the quality of training of teacher student and using effective strategies for training.

References

Abu, Hilal, Ahmad. (1980). An Experimental Study to Evaluate Practical Education Course Prepared by Faculty of Education in the University of Jordan. Magallat Dissat, 7, (1).

Abu Osba, Omar. (1996). The implementation of Effective Teaching principles by The Second Secondary Class History Teachers. Un Published thesis, Yarmouk University, Irbid, Jordan.

Akpe, C.S. (1987). The Evaluation of Nigerian Primary Teachers Education Program. Journal of Education for Teaching, 13, (31). (PP. 227-285).

Al Ahmad, Nizar. (1993). A tool for measuring the classroom teaching practices for the Teacher of Mathematics for tenth elementary grade in Jordan. Unpublished thesis, The University of Jordan.

Al Frra, Abdullah and Himran, Abdo. (1994). Guide for University and College students, Dar Al Nada, Beirut, Lebanon.

Algaseer, Ahmad.(1989). Constructing and ecaluation instrument of teachers' effectiveness. Unpublished thesis, the University of Jordan, Amman, Jordan.

Al Hashel, Sa'ad And Moh'd, Moh'd (1990).Evaluation for the effect of practical education in acquiring student teacher teaching competencies in Kuwait University. Kuwait University.

Al Hamadi, Mustafa. (1989).Evaluation of preservice science Teacher Education programat Sana'a University. Unpublished thesis, Yarmouk University, Irbid, Jordan.

Al Obathani, Salim.(1994).The Basic Teaching Competencies and their implementation by secondary school Geography Teachers in the South of the Republic of Yemen. Unpublished thesis, Yarmouk University, Irbid, Jordan.

Al Obathani, Salim.(1994).The Basic Teaching Competencies and their implementation by secondary school Georgraphy Teachers in the South of the Republic of Yemen. Unpublished thesis, Yarmouk University, Irbid, Jordan.

Badran, Mustafa and Deeb, Fathi. (1981). Evaluation of Educational Programme for Preparing a teacher in Education department in Kuwait University. Kuwait University.

Brogdon, Richard E. (1979). In Search of competencies for preparing middle school teachers, Journal of Education. 56 (Jan.) pp. (145-151).

Hassan, Hassan Moh'd.(1992).Practical Education in the Arab Gulf Countries: situation and ways for developing it. Educational Arab Office for Arab Gulf, Aria, Al-Riyad.

Jaber, A. & Salam, A. (1985). What do Students Learn from Practical Education ? College of Education yearbook, N (4).

Mrie, Tawfig. (1981). Basic Teaching Competencies for Elementary School Teacher in Jordan. Unpublished Dissertation, Ain Shams University, Cairo, Egypt.

Sualim, Mustafa. (1980). Preparing Maths' Teachers in the Education Certification Institute in Jordan Based on Teaching Compitences. Unpublished Thesis, Yarmouk University, Irbid, Jordan.

TEACHER'S VIEWS OF ASSESSMENT PRACTICE

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The assessment of students has been a controversial topic throughout the history of education. The teaching-learning process and assessment make up an on-going, never ending cycle, driven by the goal to help each student learn as much as he or she can possibly learn. Appropriate ways to gather information about the skill levels of young students continues to be an persistent issue debated by educators everywhere. The younger the child the more difficult it is to selected an appropriate mode of assessment. Young children have limited reading and writing skills, making a written examination more a measure of reading and writing ability than a valid measure of knowledge or understanding

The debate on how to assess comes to the surface with each new trend In education. For example, the heightened interest in Howard Gardner's theory of multiple intelligences (Gardner 1995), the theory of constructivist education, and intensified concerns about the development of thinking skills. To subscribe to teaching to the multiple intelligences of the student implies that one knows how to identify skills demonstrated in many different ways. To look at constructivism or thinking skills we must consider *how children think as* well as *how they* apply thinking skills, not just the answers they can give. The "hows" cannot satisfactorily be addressed with paper and pencil exams.

The Purposes of Assessment

Assessment can be defined as gathering information. Assessment, or information gathering, should not take place in isolation. It is a meaningless activity unless the information is put to good use. It is a waste of both time and resources to assess students simply so it can be said that an assessment has been carried out. There are three primary useful purposes for assessment: for planning for documentation of progress, and for reporting.

1. Assessment for the purpose of planning is called formative assessment. A worthwhile first step, it provides us with knowledge of current skill levels and understanding. The teacher can then plan the curriculum and instructional techniques to meet the needs of students.

2. The second purpose of assessment is to document progress. A teacher needs to know how much learning has taken place, how well the skills is developed, how much the student has assimilated, and whether the student can apply the knowledge or skills. Assessment which is done after a period of instruction, whether a single lesson or an entire unit, is called summative assessment and documents progress, or change in knowledge and skill levels.

   Both formative and summative assessment may take many forms including pencil and paper tasks, answers given orally, projects completed which demonstrate mastery of the knowledge or skills and observation of performance.

3. Student records must be prepared for school records and for communicating to parents. it is often necessary to maintain student records for administrative purposes also, such as program evaluation.

A simple example of using assessment would be to observe that a child is unable to tie his own shoes, teach a child how to tie his shoes, and then to have him demonstrate that he can tie his shoes by himself.

(a) The teacher observes that the child is unable to tie his own shoes.

(b) The child is shown the steps of shoe tying and given opportunity and encouragement to practice the skill.

(c) The child is observed attempting to tie his shoes. He is partially successful The difficulties are noted The process is then repeated:

i. The steps with which the child is having difficulty are re-taught and the child is given opportunity for practice.

ii. The child is observed tying his shoes. He is successful.

iii. The teacher notes the success and moves the child on to another activity.

As this simple shoe-tying example illustrates, assessment and teaching are an on-going cycle. Once a particular level of expertise is reached, the next step is planned. If the student has not reached a mastery level, re-teaching is in order, perhaps with a different approach. In a continuing, ongoing cycle we gather information about the current skill level of the child, teach and assess and then re-teach or move on to something which builds upon the knowledge or skill which has been gained. The progress must be recorded to fulfill the third primary reason for assessing: reporting and/or conferring with others. such as on school records or for use in parent-teacher conferences

Teacher Education and Assessment

Teachers must be skilled at gathering useful, objective information about their students. Based on the goals of assessment, gathering information for the purpose of planning, documenting progress, and using that information to further plan and to confer or add to records, it is crucial that the assessment both accurate and useful. Professionals involved in teacher training must be concerned with doing an adequate job of helping future teachers develop the requisite skills .In addition to being ready to work independently, the performance of student teachers during placements in the school setting as a part of their training, must meet the expectations of the mentor teachers under whom they are placed.

Survey Results

Data was collected from 80 teachers in Michigan and South Carolina. Surveys were distributed to random samples of elementary level teachers, asking about their own classroom assessment practices and their perceptions on the skills needed by student teachers.

The results Indicate that elementary school teachers in the sample use a wide variety of approaches to assessment: observations being the most frequent response. For example. 95% said they observe students at work, but only 88 % indicated they make notes on their observations. That discrepancy between the observations and the recording of the information raises concerns. The teachers' memories about the observations might be inaccurate ana therefore, the accuracy of the information they feel they have gathered is in doubt.

Contrary to the assessment approaches currently supported by many educators, only 36% of the teachers surveyed use self evaluations by the students or peer involvement in evaluation of student work.

Checklists and rating scales are used by 67% of the teachers, and slightly over one-half use tests anal quizzes.

It is apparent that most teachers rely on the day to day assignments of children, but only 67% keep the work in files or portfolios.

Like all researchers, we worked hard on the survey form and procedures and did some pilot testing. As soon as the data collection began, we could see some weaknesses in the instrument, but it was too late to make changes. One problem was that the questions about the use of observation for assessment were too vague. Observation as an assessment tool is not clearly defined, so some teachers may be reported that they use it and mean that they observe regularly and objectively and record valuable documentation. On the other hand, they may have regarded observation as meaning simply that they look at children in their classrooms. They may be making judgments about children based on informal observations which lacking both precision and reliability.

There were some weaknesses to the survey instrument for the data does not provide clarity for the teachers' answers. For example, 43% said they utilize students reflections in papers or journals but since the survey asked only if they used that approach, there is no way to judge the intensity or thoroughness of the way it is done. For example, some teachers may meet Individual with students and discuss the students' reflection on their own work. Other teachers may be using student journal writing as a two-way communication, responding to the students' writing by giving the student written feedback and/or encouragement. It is also possible that a teacher might read what a student has written and respond with only a letter grade.

The teacher responses make it clear that tests are not a very satisfactory means of assessment. Test results do not necessarily help instruction as teachers often receive only scores, and the scores are shared with the teacher long after the school-wide tests have been administered. Teachers indicated they may not get sufficient information back from the tests, or the test information is received too late to be of any value to them in planning the curriculum and/or to alter their teaching strategies.

The results also show that many teachers may have difficulty determining what assessment approaches are good and how to use the results in their teaching in order to improve student learning.

While teachers may be very uncertain about assessment, they indicated that they expect student teachers to `'know it all' The expectations were very high for the entrance level skills for future teachers

Implications of the Results

There are some clear implications from the results of the survey.

1) Teachers are not always prepared to conduct performance based assessment in the classroom. They may shy away from the approach because they are uncertain how to make it reliable and useful.

2) Further training should be made available to teachers in the field, through workshops and other delivery systems, to keep teachers informed and to help them sharpen their assessment skills.

3) The newly trained teachers graduating with teacher certification should be well prepared with both knowledge and confidence about the use of performance based assessment.

4) New teachers entering the teaching profession could have positive influence on assessment In the schools. It is essential that they have experience with the types of assessment which they are to implement prior to entering their first job. Their teacher training needs to include personal experience in alternative modes of assessment.

Portfolios, for example, should be a part of the experience in teacher training, as well as the self-monitoring of one's skill development. Experience with other approaches including cooperative learning in small groups, hands-on projects which apply the knowledge, and self evaluation should be included during the training. Exams which require thinking skills and problem solving rather than memorization must also be incorporated into all aspects of teacher training.

Summary

Today's students are being prepared for tomorrow's world, and will need to be able to problem solve, learn new things, adapt and change. Basic knowledge with always be needed, but understanding, application and expansion on that knowledge will be crucial to survival in the workplace. There will be no trade, no occupation, which will not require new learnings and adaptation. Teachers, bankers, physicians, farmers are bound to need to change. The wood carver may need to adapt to new tools, the baker adapt to using ingredients and or baking pans and ovens which are manufactured in a very different way Those who are knowledgeable about computers one month may have to learn and different ways using computers the next month.

If we want teachers to teach those future bankers, physicians, farmers to solve problems and devise new ways of reaching solutions, the teachers need to be taught in such as way at they are comfortable with alternatives in assessment.

One of the common terms used is "authentic assessment" Grace and Shores (1991) define authentic assessment as the practice of realistic student involvement in the evaluation of their own achievements. Wortham (1995) prefers the term "performance based" and avoids using the term authentic.

What we should be doing, whether it is called "authentic" or "performance-based" or just a good common sense approach, is using assessment approaches that are on-going, multifaceted, and based on what the student *does*. It looks at the approaches used to solve a problem, and whether a solution was reached. It also involves having the student become involved in his or her own assessment. Reviewing his own work, setting goals for further growth, and reflecting on the level of effort and the level of success do more for a student's further learning and for retention of the concepts than if he is simply told he was right or wrong.

Teachers in training must not only be told of appropriate assessment approaches, they must be assessed in the ways in which they should assess their future students. Cooperative learning self reflection, goal setting, and collecting samples of their own work, must all be a part of teacher education. Portfolios, the most common item in a performance-based assessment, should be experienced by students. This can be done three ways: the creation of a Professional Portfolio, the assembly of a child's portfolio, and a portfolio of their work from a single class. A portion of the training of future teachers should include having them, as teacher-training students, experience appropriate assessment approaches.

School reform will not take place without reform in the way teachers teach, and that includes the means by which they determine whether learning has taken place. Teachers cannot change the way they teach and the way s in which they assess unless they know how to do it. Many teachers do not fully understand and/or believe in alternatives to testing. In order for reform to take place we must help teachers develop appropriate assessment skills that they can implement with confidence in the classroom setting.

References

Gardner H .(*1993). Creating Minds.* New York: Basic Books.

Grace, C. & Shores, E. (1991). The Portfolio and Its Use: Developmentally Appropriate Assessment of young Children. Little Rock: Southern Association on Children Under Six.

Wortham. Sm (1995) Measurement and Evaluation in Early Childhood Education. Second Edition Englewood Cliffs, NJ: Prentice-Hall.

THE ROLE OF TEACHER CERTIFICATION PROGRAMMES IN SCHOOL PERFORMANCE

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INTRODUCTION

The professional efficiency of the teacher is considered the most important factor in the reform of the educational process, and it plays a crucial role in school reform. Professional efficiency (1) is defined as a group of integrated elements necessary for preparing a teacher who exemplifies academic personality traits such as scientific knowledge and pedagogical traits such as educational administration. School reform(2) means bringing about a qualitative change in the activities of the educational process by improving the outputs of education.

Realizing the present environmental variables inside Jordan and abroad, educational policy - makers revised and evaluated educational policy objectively and comprehensively within plans and specifications in line with these variables in order to restructure the education(3) system with the aim of educational reform. In the First National Conference for Educational Development (Sept. 1987), (4) the comprehensive review of the educational policy (3) was analyzed and there was indication of low performance of staff due to insufficient pre - service vocational training and improper in-service training to meet new academic and vocational variables. The conference recommended upgrading teachers who hold intermediate Diploma to the B.A. level, and in implementation of the recommendations, the MOE established the Higher College of Teacher Certification in 1988, with its branches in Amman, Irbid, and Kerak, in order to upgrade the qualifications of Basic Education teachers from Diploma to the B.A.

In 1991/1992, it was decided to terminate the work of these colleges reclining on the result of the evaluation studies of their programs carried out by the National Centre for Educational Research and Development. The responsibility was transferred to the Jordanian universities (Jordan, Yarmouk, Mu'tah) in accordance with a decision of the Jordanian Council of Higher Education.

The certification program plan, prepared at the University of Jordan, for the Basic cycle (class teacher), has been amended several times, with some additions and cancellations of courses. The teacher graduates after taking a total of 84 credit hours at the faculty of Education, distributed as follows : 37 academic hours, 33 education hours, 9 hours supportive courses, 5 hours (3 education & 2 vocational) plus 48 hours he had already taken for the Diploma level, to sum up for the required total credit hours (132).

To what extent do cycle teacher certification courses match with the MOE curricula of the first 3 Basic classes from the point of view of teachers and school principals?.

The importance of this study lies in the evaluation of these programs and the extent to which it meets the needs of students in the classroom, from the teachers' and principals' point of view.

The problem and importance of the study

In - service certification of teachers, especially for the Basic cycle, is a pioneer step which upgrades teaching and vocational capabilities, and reflects (5) on school development. From this prospective, the First National Conference for Educational Development (1987) emphasized in-service teacher certification programs designed for various categories, with the aim of enriching cycle teachers' experiences and developing teaching methods.

Due to amendments and cancellations of courses in the programs prepared by the University of Jordan, there has been a need for a field study in order to find out the suitability of these programs to school curricula and academic and vocational needs of students, from the class teacher's and school principal's point of view.

To investigate the role of in-service certification programs in school development and reform, this study provides scientific and objective material on which educationalists can depend to know how much these programs match the philosophy of the MOE and its curricula, and which in turn, play a big role in improving the educational process, and raise the standard of the Jordanian schools. The importance of the study lies in its emphasis on cycle teachers certification who hold the intermediate (Community college) diploma and their role in improving school performance , whereby the cycle teacher plays a big role in developing the student's personality in the Basic cycle, both academically and pedagogically.

Study questions

This study aims to know the role of in-service cycle teachers certification programs in school reform from the point of view of the teachers who joined the program in 1992/1993 and graduated in 1995/96 from the University of Jordan, and they are now working at the schools in the General Directorate of Education in the governorate of Amman. The point of view of the principals of the schools these teachers work at is also considered.

The above - mentioned aim is meant to be realized through addressing the following two questions :

1- To what extent has the class teacher benefited from the class Teacher Certification Program courses at the University of Jordan and its impact on school reform from the point of view of the teachers themselves?
2- To what extent has the teacher benefited pedagogically from the class Teacher Certification Program courses at the University of Jordan and its impact on school reform from the point of view of school principals?

Method and Procedures

Study population : It consisted of all teachers of the first Basic classes at the MOE schools who have completed the educational certification program (Class teacher) and obtained the B.A. degree in 1995/96.

Study Sample : it was selected as follows :

1- Teachers of the first 3 classes in the Basic Education cycle, who joined the Teacher Certification Program (Class teacher) in 1992/93, and fulfilled the graduation requirements of the Faculty of Educational Sciences at the University of Jordan in 1995/96. These teachers are recruited in the General Directorate of Education of the Governorate of Amman (Capital). They are 20 in number. Table No. (1) indicates the distribution of the sample individuals.

Table No. (1)
Distribution of sample Individuals (teachers)

Directorate	Male Teachers	Female Teachers	Total
Amman (1)	5	4	9
Amman (2)	3	4	7
Amman (3)	2	2	4
Total	10	10	20

2- Principals of Basic schools in which the teachers of sample (1) were interviewed. They are 17 in number and are distributed on the schools of the General Directorate of Education of the Governorate of Amman (capital). Table No. (2) indicates this distribution.

Table No. (2)
Distribution of the Study Sample Individuals (principals)

Directorate	Male Teachers	Female Teachers	Total
Amman (1)	3	3	6
Amman (2)	3	4	7
Amman (3)	2	2	4
Total	8	9	17

Study tool :To answer the study questions the following procedures were carried out .

1- Interview: through studying the Educational Certification Program Plan of class teachers (6), which was prepared by the University of Jordan and it included compulsory and elective academic and educational courses, and on this basic , the teachers were asked about the extent to which they benefited from those courses and their reflection on the students and the school in general.

2- Questionnaire : through reviewing previous educational literature on in-service teacher certification. (7,8,9,10) It included what the teacher does in the classroom in the way of pedagogical matters related to planning, administration human relations, teaching, and evaluation, and on this basic the following procedures were carried out :

- A tool consisting of 50 items was constructed to measure the realization of the above - mentioned elements from the principals' point of view.
- It was presented to a group of educational directors and supervisors at the MOE and amended in the light of their comments.
- It was finalized, and it consisted of 35 items distributed on the following four areas :
  1- Planning (items 1-3).
  2- Administration and human relations (items 4-17).
  3- Teaching (items 18-30).
  4- Evaluation (items 31-35).
- The answer scale of the tool items was of three levels :
  * High : 3
  * Medium : 2
  * Low : 1

Procedures :

After determining the study sample from the directorates mentioned in table (1) and (2) and constructing the tools, the following procedures were carried out :

1- Selecting the sample individuals from the directorates within the General Directorate of Education of the Governorate of Amman (Capital) deliberately for the purposes of the study.

2- Determining the schools in which the teachers who have completed the requirements of the B.A. degree (class teacher certification) are working.

3- Interviewing the sample teachers and recording their answers to the questions prepared.

4- Interviewing the sample principals to fill out the questionnaire prepared on the performance of the teachers interviewed in the same school.

5- To come out with the results of the study, the answers of the teachers and principals were analyzed, and the means and frequencies were calculated manually.

Statistical analysis

To answer the questions of the study, the means and frequencies of the answers of the sample individuals were calculated.

The results of the study
Presentation and discussion of results :

Results related to the first question : To what extent have class teachers benefited from the certification program and its impact on school reform from their point of view?

Academic Courses:

Arabic language:

Regarding the academic courses : There was a high percentage of benefit (90%) in Arabic language (writing and composition). It could be employed in classrooms because they match the MOE curricula of this stage, in the way of writing style, organizing thoughts, and paragraphs and other writing skills.

As to grammar there was a low percentage of benefit (95%) negative response because it dealt with subjects not matching the curricula of the first three basic classes, above students level, and the benefit was limited to a few grammar points.

Islamic Education

As to grammar there was a low percentage of benefit (95%) negative response because it dealt with subjects not matching the curricula of the first three basic classes, above students level, and the benefit was limited to a few grammar points.

As to Islamic education 95% of the teachers gave positive answers on (Tilawa and Tajweed) , being in harmony with the curricula, while in (Fiqh and Aqeeda) 60% of the responses were that they did not benefit because those 2 subjects were above the students' level and could not be employed inside the classroom at all. The teacher, on the other hand, could benefit in his life, behaviour, and post-graduate studies from them.

Social Sciences :

The history of Jordan and Palestine was considered useless by 75% of the respondents because of the complexity of historical information. The only benefit lay in the Great Arab Revolt, which harmonized with the MOE curricula.

The geography of the Arab World was considered useless by 90% of the respondents because it tackled geographical survey subjects above students' level. The only benefit lay in the map of Jordan.

Sciences :

85% of the respondents said that principles of natural science were not benefiting because they dealt with pure physics above students' level, while 75% of the respondents saw general geology unbenefitting for being a pure science . The only benefit lay in its dealing with rocks, which harmonized with the MOE curricula of the first three basic classes.

Mathematics :

The positive rate was 70% because it dealt with subjects matching MOE curricula, age of students, and teacher capabilities were increased. The geometry course was seen as useless by 90% of the respondents because it was above the students' level and there was no need for using it inside the classroom as it didn't match MOE curricula.

Academic courses :

Arabic Writing: there was 100% positive response on Arabic writing because they matched the curricula, were easy to apply, and the teachers' writing practices improved, which in turn reflected on the students.

Physical education : there was 60% positive response because this age group tend to practice easy games especially football (males) and volleyball (females) . This course needs higher physical abilities.

Arts : There was 86% negative response because it required skills and equipment and students in this cycle favor drawing skills only.

Vocations : there was 65% positive response because they matched the curricula, while some attributed the difficulty to the shortage of equipment in the schools.

Educational Courses

Curricula and teaching methods : there was 90% positive response due to the various teaching methods which had a clear positive impact on teachers inside the classroom, and which the school principal confirmed too in the questionnaire.

Measurement and evaluation : there was 85% positive response due to its benefit to teachers in defining objectives and measuring their realization, and setting down and diversifying in achievement tests which was reflected on the performance of teachers inside the school, as confirmed by the principal.

Teaching methods of Arabic, Islamic education, social sciences, mathematics : there was 100% positive response because they matched the students level and increased the teachers' skills in setting down the plan, objectives, activities, and in dealing with training material prepared at the MOE.

Practical Education : there was 75% negative response due to the fact that most teachers enrolled in the program already had sufficient teaching experience, and this course had no defined objectives and plans set down by the university professors. This course required discussing the experiences of the teachers themselves without evaluation.

Optional courses : There was 87% negative response due to the difficulty of realizing them inside the school. Only first aid could be dealt with.

Civics: There was 65% positive response due to the fact that it dealt with subjects related to habits and values which could be acquired by students and reflected on their lives.

Environmental education : there was 90% negative response due to the fact that it dealt with subjects above the students' level and there was no need for it in the MOE curricula. The only benefit was that it talked about environmental cleanliness.

Development of linguistic readiness : there was 100% positive response due to the fact that it dealt with subjects which help the teacher understand students' age stages and how to develop speech and language skills in him.

Introduction to special education : there was 80% positive response because it dealt with subjects related to students with special needs.

Supportive subjects

Educational psychology : 85% of the teachers confirmed the importance of it because it dealt with child development physically, psychologically , socially, and cognitively, which was reflected on the teacher's performance in - class.

Class management : there was 75% positive response for it dealt with providing suitable class atmosphere, managing discussion and dialogue, and accepting students' opinions which had an effect on developing democracy as was pointed out by the principals.

Research designs in education and psychology : there was 95% negative response due to the difficulty the teachers faced to utilize it inside the classroom, as they don't have sufficient time for conducting research. Most of them said that only personal benefit could be gained and post - graduate studies followed up.

Table No. (3) indicates the percentage response on the academic and pedagogical benefit from the certification study plan courses.

Table No. (3)

The percentage responses on the academic and pedagogical benefit from the certification program courses

Type of Course	Name of course	Benefit percentage
(1) Academic courses Arabic	writing & composition	90%
	Grammar (a)	5%
	Grammar (b)	5%
Islamic education	Principals of Tilawa & Tajweed	95%
	Basics in Aqeeda	40%
	Basics in Fiqh	40%
Social sciences	History of Jordan & Palestine	25%
	Geography of the Arab World	10%
Science	Principles of Natural Sciences	10%
	General Geology	16%
Mathematics	General Maths	70%
	Number Structure	10%
Academic subjects	Arabic writing	100%
	Physical Education	60%
	Arts	14%
	Vocations	65%
(2) Educational Courses		
Educational subjects	Curricula & teaching methods	60%
	Measurement & Evaluation	85%
	Islamic Education Teaching Methods	100%
	Arabic Language Teaching Methods	100%
	Mathematics Teaching Methods	100%
	Social Sciences Teaching Methods	100%
Theoretical Subject	Practical Education	25%
Optional Subjects	Health & Social Education civics	13%
	Environmental Education	65%
	Development of linguistic Readiness	10%
	Introduction to special Education	80%
Supportive Subjects	Educational Psychology	85%
	Classroom Management	75%
	Research Designs in Education and Psychology	5%

Table No. (3) indicates that eleven courses were of high benefit (80%-100%) because they matched the MOE curricula and they were easy to utilize inside the classroom, because they were suitable to the student knowledge level. The teachers recommended that these subjects should exist in the class teacher certification program plan.

Six courses were of medium benefit (60%-75%) because they matched the MOE curricula and they were easy to utilize inside the classroom, while the rest of the courses were above the students' level.

Fifteen courses were of low benefit (5%-40%) because most of them did not match the MOE curricula and they were difficult to utilize inside the classroom because they were above the students' level.

Results of the second question

To what extent did the pedagogical teacher benefit from the class teacher certification program at the University of Jordan and its impact on school reform from the point of view of school principals?

The results indicated that the means for planning were in descending order as clarified in table No. (4).

Table No. (4)
Means of responses of principals for planning in descending order

Item No.	Item Rank	Item	Mean
1	3	Prepares the class before giving the lesson in an innovative way	2.9
2	1	Develops in and plans his daily lesson including in it all elements.	2.85
3	2	Shows improvement in preparing his term and annual plans.	2.75

Table No. (4) indicates that the means on the items of planning were high (2.9-2.75), which is attributed to the importance of educational courses which dealt with plans, objectives, teaching methods, and educational psychology.

The means for Administration and Human Relations were as indicated in Table No. (5), in descending order.

Table No. (5)
Means of responses of principals for administration and human relations

Item No.	Item Rank	Item	Mean
4	11	Shows improvemerit in considering individual differences & directs learning towards them.	2.9
5	8	Inspects the conditions of students & the classroom continuously.	2.85
6	10	Cares for keeping student records	2.75
7	9	Develops in the students virtuous values and habits such as discipline, obedience, and cleanliness.	2.7
8	5	Shows improvement in responding to the educational supervisor.	2.65
9	6	Keen to have good relationships with his colleagues and students.	2.55
10	4	Shows improvement in communicating with the administration inside the school.	2.5

Cont. Table (5)

11	7	Interested in discussion and dialogue, accepts students' opinions and suggestions, and treats them in a democratic way.	2.5
12	16	can be depended on in carrying out his responsibilities satisfactorily.	2.45
13	13	Interested in school meetings and participates in them efficiently.	2.2
14	15	Uses the scientific method in solving problems.	2.15
15	12	Shows improvement in time management and attendance	2.1
16	14	Shows improvement in using school facilities such as the library and labs.. and utilize them for various lessons and activities.	2.05
17	17	Participates in school activities and contests efficiently.	2

Table No. (5) indicates that means of responses on administration and human relations, such as considering individual differences, inspecting students' conditions and classrooms, keeping student records, and developing virtuous values and habits in the students, were high (2.7-2.9) because these are the main tasks of the class teacher, besides acquiring some behavior patterns through the certification program courses, such as health and social education.

The means of some other items, such as using school facilities and participating in school activities and contests, were moderate (2-2.05) because the teaching load of the class teacher was high (24 weekly periods), which did not give him enough time for extra - curricular activities on a large scale.

He is limited to achieving the lesson objectives.

The mean of items on teaching are clarified in Table No. (6) in descending order.

Table No. (6)

Means of responses of principals on teaching in descending order

Item No.	Item Rank	Item	Mean
18	20	Clarifies the text examples and exercise accurately.	2.8
19	18	Diversifies in teaching methods according to matters which come up.	2.65
20	19	Shows improvement in following up new issues in the subject of his specialization.	2.65
21	23	Gives students opportunity to answer	2.65
22	24	Links between reading and writing skills and follows up.	2.65
23	21	Goes from the simple to the complicated in his teaching	2.6
24	22	Uses simple classical language during teaching and encourages the students to do so.	2.55
25	26	Uses various methods for solving problems especially in mathematics.	2.5
26	28	Shows improvement in motivating and encouraging students.	2.45
27	29	Diversifies in teaching methods to suit the educational situations.	2.45
28	27	Provides scientific activities suitable to the age of students and study cycle.	2.25
29	30	Employs the students environment to simplify concept and study material.	2.2

Table No. (6) indicates that the means in items 1,2,3,4,5, were high (2.6-2.8) attributed to benefits achieved from the certification courses at the university in teaching methods which are reflected on the teacher's performance, while the means on items 11 and 12 were higher than average (2.25-2.29) because of insufficient time for practicing such activities as the teacher spends most of his time inside the classroom, as well as because of lack of equipment for implementation of such activities.

The means for evaluation are clarified in Table No. (7) in descending order.

Table No. (7)
Means of responses of principals on evaluation in descending order

Item No.	Item Rank	Item	Mean
30	32	Evaluates students' work stage by stage	2.6
31	33	Evaluates students' work final evaluation	2.6
32	35	Shows improvement in phrasing exam questions and diversifies.	2.55
33	34	Eager to have students participate by giving practical examples on the subject.	2.5
34	31	Eager to use the feedback method before moving on to the next point.	2.45
35	36	Participates with colleagues in evaluating school performance at the end of the academic year.	2.35

Table No. (7) indicates that the means in item 1,2,3,4 were high because the teachers acquired evaluation skills introduced in the certification program such as teaching methods, measurement and evaluation.

Table No. (8) clarifies the means for the four fields in descending order.

Table No. (8)
Means of responses of principals for the academic and educational fields in descending order

Field	Field	Field	Mean
1	1	Planning	2.83
2	3	Teaching	2.52
3	4	Evaluation	2.50
4	2	Administration and Human Relations	2.45

It is noticed from Table no. (8) that the educational courses of the certification program contributed highly to the academic and pedagogical performance of the teacher in the field of planning from the point of view of principals . It was (2.83). But in the field of teaching evaluation , administration and human relations the contribution was higher than the average (2.45-2.52), which indicates the role of teacher certification in school reform, whereby the elements of school reform are attributed to high teacher competency both academically and pedagogically.

CONCLUSIONS

In the light of the study results, the following can be concluded :

701

1- There was a 53.4% benefit from the certification courses both to the student and teacher, whereby the teachers could utilize the information and skills inside the classroom. They also match the MOE curricula for this cycle.

2- There was a 46.28% weakness in benefit from the certification program courses to the student because they were above his level and the teacher couldn't employ them efficiently.
Nevertheless, he enlarged his information base.

3- There was upgrading in teacher performance in all fields.

4- As to facility use, school activities and contests, employing the student environment to simplify concepts and study material, the level of teacher performance was moderate.

5- The in - service cycle teacher certification has an important role in school reform.

RECOMMENDATIONS

In the light of the study results the researchers recommend the following :

1- Reconsidering the courses given by the Faculty of Education at the University of Jordan for class teacher certification, whereby they match the students' level and the MOE curricula.

2- Reconsidering the "Practical Education" subject whereby its objectives and methods are defined, accessible to the learner.

3- Forming an educational cooperative committee for constant coordination and follow - up between the MOE curricula and courses offered at the University.

4- Teachers urged the use of school facilities , participating in school activities and contests, and employing the student environment to simplify concepts and study subjects.

References

Batty Dilton - Peterson (Charperson and Edton) staff Development/Organization Development. Alexandria Va: ASCO 1961 PP 1-10-86-113-127.

Resalat Al-Mualim issue No. 1 Vol. 36 March 1995 Ministry of Education -Jordan.

Abuashaikh, Mustafa. Al-Azzam, Mahmoud "In-service Certification of Educationalists" A working Paper for the National Seminar held on 26/6/1996/ Amman.

Risalat Al-Mualim issue No. (3,4) Vol. 29 August 1988 topic "First National Conference for Educational Development". Ministry of Education - Jordan.

Risalat Al-Mualim issue No. (1,2) vol. 30 July 1989 topic "Educational Development Programs and Projects 1988-1989". Ministry of Education - Jordan.

Student Manual" 1993/1994 the University of Jordan Faculty of Education.

Al-Akraf, Mubaraka Saleh Ali, (Development of In-Service Class Teacher Training Programs in Qatar in the light of Introduction to Capabilities) A Doctorate Thesis Ain Shams University 1990.

Taleb, Moh'd Taresh (Certification and Training of Elementary Cycle Teachers in Yemen, it State of Affairs) . Adoctorate Thesis Ain Shams, 1989.

Risalat Al-Mualim Issue No. 1 Vol. 29 February 1988 Ministry of Education - Jordan.

Risalat Al-Mualim issue No. 5 vol. 29 October 1988-Ministry of Education - Jordan.

Annex No. (1)
Items of the Questionnaire (tool of the Study)

Field (1) : Planning				
No.	Item	H	M	L
1	Develops his lesson plan pre paration fulfilling its basic elements.			
2	Shows improvement in preparing his term and annual plans.			
3	Prepares his class for the lesson in an innovative way.			
Field "2" : Administration & Human Relations				
4	Shows improvement in communicating with the school administration.			
5	Shows improvement in dealing with and responding to the educational supervisor.			
6	He is keen to develop good relations with his colleagues and students.			
7	Encourages discussion and dialogue, and accepts the students' opinions and suggestions, and practices democracy with them.			
8	Inspects students' conditions and the classrooms continually.			
9	Develops in the students some positive values and habits, such as discipline , obedience, and cleanliness.			
10	Shows interest in keeping records of students and their grades.			
11	Shows improvement in taking into consideration individual differences of students and gearing their learning towards them.			
12	Shows improvement in time management and school attendance.			
13	Takes part in school meetings efficiently and willingly.			
14	Shows improvement in using the school facilities such as libraries, labs etc. and utilizes them for study and various activities.			
15	Uses the scientific method in solving the problems he faces.			
16	Can be depended on in carrying out his duties and responsibilities, and performs them satisfactorily and on time.			

No.	Item	H	M	L
Field "3" : Teaching				
17	Takes part in school activities and competitions efficiently.			
18	Diversifies in teaching methods according to new situations.			
19	Shows improvement in keeping up with new issues in his subject of specialization.			
20	Clarifies to his students the examples and exercises in the textbooks.			
21	Moves from the simple to the complicated in his teaching.			
22	Uses simplified classical Arabic while teaching and encourages his students to use it.			
23	Gives the students enough time to answer.			
24	Links reading skills with writing skills and follows up.			
25	Explains to his students more than one method for solving exercises, especially in mathematics.			
26	He is committed to offer educational activities suitable to the age of the students and to the study cycle.			
27	Shows improvement in motivating students.			
28	Varies in teaching methods according to educational situations.			
29	Utilizes the environment around the student in simplifying concepts and study material.			
Field "4" Evaluation				
30	Is keen to use the feedback method before going on to the next item.			
31	Evaluates the work of pupils at the end of each stage.			
32	Evaluates the work of pupils a final evaluation.			
33	Encourages pupils to participate through giving applicable examples on the subject.			
34	Shows improvement in setting down examination questions and uses diversification.			
35	Participates with his colleagues in evaluating school performance at the end of the academic year.			

Annex No. (2)
In - service teacher certification program plan at the faculty of Education/ The University of Jordan for students/teachers in 1995/94

First	***Academic Courses: (37) credit hours***	
	Name of course	No. of hours
1-	***Arabic language***	
	- writing & composition	3
	- Grammar (a)	3
	- Grammar (B)	3
2-	***Islamic Education***	
	- Principles of Tilawa & Tajweed	2
	- Basic in Aqeeda	2
	- Basic in Fiqh	2
3-	***Social Sciences***	
	- History of Jordan & Palestine	3
	- Geography of the Arab world	3
4-	***Science***	
	- Principles of Natural Science	3
	- General Geology	3
5-	***Mathematics***	
	- General Maths	3
	- Number Structure	3
	- Basic in geometry	3
Second	***Academic Subjects : Student selects 8 hours***	
	1- Arabic writing	2
	2- Physical Education	2
	3- Arts	2
	4- Vocations	2
	5- Music	2
Third:	Compulsory Educational courses	(24) hours
	1- Curricula & teaching methods	3
	2- Measurement & Evaluation	3
	3- Arabic language Teaching methods	3
	4- Islamic Education Teaching Methods	3
	5- Mathematics Teaching methods	3
	6- Sciences Teaching Methods	3
	7- Social Sciences Teaching Methods	3
	8- Practical Education (theory)	3

Fourth:	***Optional Educational courses : student selects 6 hours***	
	1- Health & Social Education	3
	2- Civics Education	3
	3- Environmental Education	3
	4- Development of Linguistic Readiness	3
	5- Introduction to Special Education	3
Fifth:	***Supportive courses***	9 hours
	1- Educational Psychology	3
	2- Classroom Management	3
	3- Research Designs in Education and Psychology	3
	Total	84

THE IMPACT OF PRE-SERVICE TEACHER EDUCATION PROGRAM AT THE UNIVERSITY OF JORDAN ON PEDAGOGICAL THINKING OF ITS STUDENTS

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INTRODUCTION

The college of Educational sciences at the University of Jordan started in the academic year 91/92 offering new teacher education programs for prospective teachers, in response to the demands of the comprehensive Educational development project which the government of Jordan launched in 1988 . The major goal of the new teacher education programs has been to "Professionally" and academically prepare prospective teachers for basic education. At present, two programs are offered : a classroom teacher education program that prepares students to be teachers for the first four basic education grades (1-4) and a field teacher education program that prepares students to teach a field of subjects for the other six basic education grades (5-10) Both programs consist of a general educational component, an academic component and a pedagogical component. The pedagogical component includes course work in foundations of education, curriculum and instruction and educational Psychology and student teaching experience. The academic and pedagogical courses are offered concurrently. The academic courses are offered and taught by the concerned academic departments at the University; whereas pedagogical courses are offered and taught by the faculty of educational sciences.

The pedagogical courses are often taught using lecture or lecture - discussion techniques and primarily emphasize learning theoretical knowledge with some applications to classroom learning and teaching. Little coordination exists between student teaching experiences and what students learn in pedagogical course work. Likewise, very little coordination exists between what students learn in the academic courses and what they learn from the pedagogical courses.

Despite these deficits, the new teacher education programs are looked at as an important instrument for actualizing the ambitious expectations of the Educational Development Project, which are often described as transforming classroom learning from its present form of passiveness and low understanding into an active and high thinking and understanding form.

Thus, the new teacher education programs are challenged to develop in prospective teachers the ability "to learn to teach" effectively for understanding. The "learning to teach" ability is complex and developmental. According to Broke and putnam (1996), "learning to teach" is a complex process that involves an interplay of cognitive and metacognitive skills, knowledge structures , affective predispositions and classroom practice. Schulman (Borko, 1989) conceives of "learning to teach" ability as requiring seven kinds of knowledge: general pedagogic, subject matter, curricular, other content, knowledge of learning, knowledge of educational aims and purposes , and pedagogical content knowledge. Pedagogical content knowledge is the most important and has been used by Shulman to refer to thinking or reasoning used in the critical transforming of subject matter content into teachable (or learnable) forms. This pedagogical thinking is open-ended and cyclic; each cycle includes, in order, the processes of comprehension, transforming, instruction evaluation and reflection and results in a new comprehension that starts a new cycle of thinking at a higher level of understanding and performance (Anderson, 1989).

Pedagogical thinking, as described by Shulman, is developmental, and it is not something that can easily be accomplished. However, prospective teachers are expected to undergo-upon graduation-some changes in their pedagogical thinking if their teacher education program is indeed effective. The growth in pedagogical thinking can be taken as a benchmark for judging the quality of teacher education programs.

The present study is an attempt to explore the change in pedagogical thinking of prospective teachers as a result of their course work in the teacher education program. The change in pedagogical thinking due to student teaching experience is not explored.

Theoretical Framework

Students usually enter the pre-service teacher education programs with pre-existing knowledge, beliefs and images about teaching, learning of and about practical teaching situations and problems. These pre-conceptions are formed by them during their own experiences as students in schools (Good, 1990; Borko and Putnam, 1996). However, during their college study, student teachers are further exposed to experiences that may strengthen weaken or change these pre-conceptions. Students' pre-conception, as relevant research indicates (Anderson, 1989; Borko and putnam, 1996), are resistant to change, since they are inconsistent with what university professors usually preach for. Development of the "learning to teach ability" or pedagogical thinking should, therefore, be conceived, from this perspective, as a difficult conceptual change process. A comparison between students' pre-conceptions when they just enter the program and their conception when they nearly complete their course work and start their student teaching experiences would reveal the success of the teacher education programs in inducing and bringing about the conceptual change process.

Student teachers' conceptions and thinking can be elicited using different methods. One common method is to present to student teachers verbally or on video structured practical situations in the form of short episodes or cases and ask them to examine, analyze and reflect on those situations. Most often, the analysis and reflection are done in structured interviews; in some cases, the analysis and reflection are done through responding to questions as in a questionnaire. In both cases, the verbal descriptions given by student teachers, whether orally or in writing, constitute the data from which student teachers conceptions and thinking are inferred (calderhead, 1996). Verbal descriptions are, thus, conceived as a means for externalizing the tacit understandings and thinking of student teachers (Alexander and Dochy, 1995). However, care must be exercised in interpreting the verbal descriptions. One has to recognize the limits of questions and exercise self-restraint on his interpretations (Alexander and Dochy, 1995). Interpretations of verbal descriptions are usually made in reference to an appropriate analytical framework.

The analytic framework used in the present study for identifying the pedagogical thinking of student teachers is shown in figure (1). As revealed in figure (1), student teachers are given problematic practical teaching situation and asked to offer a solution and justify their solution. Student teachers reading the situation are assumed to use their conceptions in perceiving, interpreting and resolving the problem in the practical situation. The process of interpreting and the resolving the problem is viewed to include: a) identifying the critical or important variables that appropriately and adequately describe the situation; b) retrieve rules, principles and beliefs relevant to dealing with the situation; c) suggest a solution to the problem in the situation; and d)build up an argument that links knowledge elicited and variables identified to the suggested solution. This four-step process of interpreting and resolving the problem is considered an adequate representation of pedagogical thinking as used in the present study .

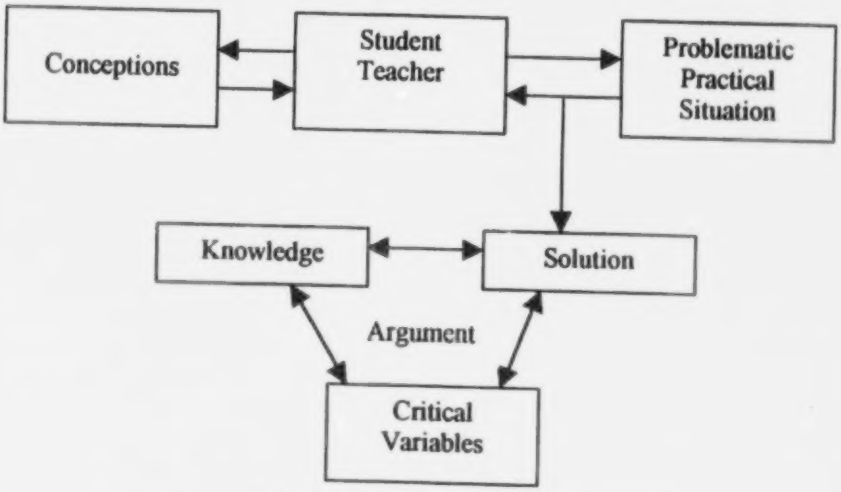

Figure (1) : The analytic Framework

Questions:

In accordance with the analytic framework mentioned above, the study attempted to answer the following questions:

1. Are there defferences in the number and type of critical variables used between student teachers entering the teacher education program and hose who have completed their course work in analyzing the practical situations?
2. Is knowledge elicited by student teachers entering the teacher education program different from that elicited by student teachers who have completed the course work?
3. Are solutions suggested by student teachers entering the teacher education program different from those suggested by student teachers who have completed the course work?
4. Are arguments offered by student teachers entering the teacher program different from those offered by student teachers who have completed the course work?

Procedure

The sample. The sample for the study consisted of (59) students enrolling in the pre-service teacher education programs: (24) fourth year students who had almost completed their coursework and (35) first year students who had just entered the programs. The subsamples of fourth and first year students constituted respectively about (30%) and (1%) of corresponding populations. Both subsamples were randomly selected using the simple random technique .

The instrument. The instrument used in the study was a questionnaire consisting of five "teaching cases". Each case described a problematic practical teaching situation that teachers often face. Students were requested to carefully read each case, offer a solution and defend their solution. The "cases" were designed in such a way as to reflect cognitive aspects of teaching, motivate students into inquiry and generate varied solutions (Harrington and Garrison, 1992).

The first case described a situation where a sixth grad science teacher who taught a lesson to his students found himself confused because his students did very poorly on a short test that he gave at the end of the lesson. The second case described a situation where a teacher of elementary mathematics seemed to be very satisfied with her students' learning and performance on tests that she prepared; but they her students did poorly on an external test administered to her students by a researcher , something that caused her a lot of worry. The third case depicted the situation of a fifth grade teacher who used some measures to capture the attention of some of her students who seemed to be inattentive; however, her measures seemed to be ineffective and students continued to be inattentive. The fourth case described a situation where a teacher caught a ten grade student cheating in an examination. The student came from a poor family and her study at the school was subsidized by her school because of her high performance in athletics . The teacher found herself much confused : Should she report the cheating to school administration or should she ignore the whole matter?. The fifth case described a situation where a fifth grade mathematics teacher found out at the beginning of the school year that his students were very weak in basic mathematical skills. The case depicted the teacher questioning himself: should she teach his students the mathematical skills or should she ignore that and teach them the topics prescribed for the fifth grade? The questionnaire was administered to students at the beginning of the academic year 1996/1997.

The analysis of data. Students' responses to the questionnaire were analyzed using the analytic frame described previously. Every student is response to each case was, thus, carefully segmented into meaningful units, which were then examined and analyzed using the following analysis scheme; solution offered, critical variables used knowledge and sepatately for each case elicited, and argument used to defend the offered solution. The results of analysis for each case were then transferred to specifically designed work sheets, combined and classified for further analysis .

To ensure the validity and reliability of analysis of students' responses , the researchers met and continued to analyze together a number of questionnaires, until a common understanding of the analysis scheme was reached. Moreover, each researcher checked on his own analysis and analysis of his colleagues by redoing the analysis at a later time

The Findings

The findings of the study are presented using the above-mentioned analysis scheme.

a. *Critical variables :*

Tables (1) and (2) reveal respectively by teaching case the variables that fourth and first year students took into consideration in perceiving and analyzing the practical teaching situations presented to them . As clearly shown in the two tables, the kind, number and frequency of variables seemed to vary from one case to another.

Twenty variable were mentioned by fourth year students in the five teaching cases and nineteen by first year students. Twelve variables were common and appeared in both groups of students with nearly similar frequency. The most frequent common variables were: the instructional technique, the form and kind of evaluation of students' learning, students' readiness and preparation for tests, the classroom management technique, the cognitive structure of students and learning new material.

Further examination of the two tables revealed that some variable that were mentioned by first year students such as student personality and student errors did not appear at all in the list of variables mentioned by fourth year students. Other variables used by first students like individual differences and students' career seemed to reappear among fourth year students under new names (i.e. students' level of development and students' self-concepts).

Table (3) reveals the distribution of fourth and first year students by the number of variables considered in analyzing the practical situation in each teaching case. In case (1), more fourth students than first year students seemed to look at the practical teaching situation from more than two aspects. In case (2), nearly two thirds of first year students viewed the teaching situation from one aspect only, while one third of fourth year students viewed it similarly. However, in case (3), more first year students than fourth year appeared to focus on more than aspects of the teaching situation. In case (4), more than half of first year students did not identify any critical attribute of the teaching situation they and preferred to view it holistically; while nearly one fifth of fourth year students viewed the situation like-wise .

In case (5), fourth and first year students seemed to view the teaching situation similarly , and the majority of them (about three quarters) seemed to view the situation from only one aspect .

The similarity of fourth year and first year distributions by teaching case was examined using the x^2 test. A Significant difference ($p<.025$) between the two distributions was found only for cases (2) and (5)

Table (1)

Variables Used By Fourth Year Students In Analysis of Situations By Teaching Case

Variable	Case				
	1	2	3	4	5
Instructional technique	17	12	8	-	-
Form of Evaluation	10	13	-	-	-
Student motivation	5	1	-	-	-
Lesson content	4	-	-	-	-
Readiness for test	3	4	-	-	-
Study methods and habits	1	-	-	2	-
Management teachings	-	-	4	-	-
Teacher personality	-	-	2	-	-
Attitudes toward students	-	-	2	-	-
Cognitive structure of students	-	-	-		6
Learning new information	-	-	-	-	7
Curriculum Coverage	-	-	-	-	1
Learning environment	2	1	1	-	-
Student level	5	-	1	-	1
Kind of instructional	1	-	-	-	1
Self - concept objective	-	-	-	6	-
Awareness of behavior	-	-	-	4	-
Behavior repetition	-	-	-	5	-

Table (2)
Variables Used By Fourth Year Students In Analysis of Situations By Teaching Case

Variable	Case 1	2	3	4	5
Instructional technique	29	14	13	-	-
Form of Evaluation	8	21	-	-	-
Student motivation	1	-	-	-	-
Lesson content	1	2	-	-	-
Readiness for test	5	6	-	-	-
Study methods and habits	1	-	-	1	-
Management teachings	-	-	13	-	-
Teacher personality	-	-	1	-	-
Attitudes toward students	-	-	-	1	-
Cognitive structure of students	-	-	-	-	6
Learning new information	-	-	-	-	10
Curriculum coverage	-	-	-	-	12
Student errors	3	1	-	-	-
Individual differences	9	-	-	-	-
Student personality	-	1	-	-	-
Behavioral motives	-	-	6	6	-
Students' attitudes	-	-	-	1	-
Students' future	-	-	-	4	-
School regulations	-			1	-

Table (3)
Distribution Of Fourth And First Year Students By Number Of Variables And By Teaching Case

Case Year		None	1	2	3	X - vale
1	Fourth	1	9	6	8	5.01
	First	2	13	16	4	
2	Fourth	0	8	12	4	5.99*
	First	1	22	11	1	
3	Fourth	10	10	3	1	1
	First	11	15	9	0	
4	Fourth	5	19	-	-	7.69**
	First	20	15	-	-	
5	Fourth	5	19	-	-	1
	First	8	27	-	-	

* P . 025

** P . 01

b. Knowledge elicited

Fourth and first year students revealed many varied beliefs, concepts and principles in analyzing and reflecting on the teaching cases presented to them. Therefore, students' beliefs and concepts were classified into eight categories: factors affecting good learning; characteristics of good teaching; characteristic of good tests and evaluation;

factors influencing students' performance on tests; characteristics of good classroom management; factors dealing with inattentive behavior; factors influencing good classroom management; and factors dealing with cheating behavior.

Tables (4-11) reveal responses in each of the eight categories and the frequency of their use by fourth and first year students. Concerning factors influencing good learning, first year students seemed to focus more than fourth year students on instructional techniques. Fourth year students seemed to focus more on students' attention, learning environment and good explanation of content. With respect to characteristics of good teaching, fourth year students seemed to emphasize more the use of feedback and reinforcement, while first year students seemed to emphasize more the role of teachers in correcting students' errors.

Regarding characteristics of good evaluation of students' learning, fourth year students focused on necessity of using varied techniques of evaluation; while first year students focused more on consideration of individual differences in evaluation.

With respect to factors influencing students' performance on tests, fourth year students focused more on good explanation by teachers and on cognitive level of test questions, while first year students emphasized more training their on varied types of questions and students' preparation for tests.

Concerning characteristics of good classroom management, both groups of students seemed to emphasize the importance of motivating students and understanding the motives of their misbehavior. However, fourth year students seemed to emphasize more students' engagement in classroom activities.

First year students seem to emphasize more than four year students the use of punishment in dealing with student's misbehaviour in classroom. Concerning factors influencing classroom management. First year students also seemed to emphasize more than four year students the role of instructional techniques in achieving successful management of classroom.

With regards to dealing with student's cheating, more first year than fourth year students seemed to emphasize the role of punishment and counseling.

Table(4)
Factors Affecting Good Learning

Factor	Fourth year	1st year
Good teaching	5	7
Good explanation	10	9
Instructional technique	3	19
Student attention	4	-
Learning Environment	2	-
Student effort	2	2
Student participation	2	1
Quality of input	1	-

Table (5)
Characteristics of Good Teaching

Characteristic	4th year	1st year
Interactive	-	2
Connecting learning to life	-	2
Motivating	2	-
Using continuous evaluation	1	-
discussion-based	1	-
usage feedback	5	-
correcting students' errors	1	4
Adaptive to individual differences	2	-
varied in style	2	-
Adaptive to goals	3	1
considering students' level	2	1
linking information to old information	6	3

Table (6)
Characteristics of Good Evaluation

Characteristic	4th year	1st year
Consideration of individual diff.	3	9
Variation in form	8	-
comprehensiveness	1	-
considering students' level	-	4
Encouraging thinking	-	4
Encouraging thinking	1	4

Table(7)
Factors Influencing Students' Performance on Tests

Factor	4th year	1st year
Kind and level of questions	8	3
Training on types of questions	3	13
student preparation for tests	1	6
Test anxiety or Fear	1	5
Good Explanation	8	3

Table (8)
Characteristics of Good Classroom Management

Characteristic	4th year	1st year
Students' engagement	6	3
Students' participation	2	3
Varied styles of management	4	2
Strictness	1	1
Students' motivation	6	9
Good teaching	2	2
Consideration of motives of misbehavior	6	7

Table (9)
Dealing with student misbehaviour

Means	4th year	1st year
Punishment	3	8
Reinforcement	-	1
Counseling	-	1
Reprimands	1	-
Appeasing students	1	-
Separation of students	1	-
Referring to school counselor	1	3
Referring to school administration	1	2
Involvement of parents	1	2

Table (10)
Factors Influencing Classroom Management

Factor	4th year	1st year
Teacher Personality	2	1
Learning environment	1	-
Teaching methods	2	5
Management Techniques	3	2

Table (11)
Dealing With Cheating

Means	4th year	1st year
Counseling	5	15
Referring to administration	3	2
Awareness of behaviour	5	1
Involvement of parents	1	4
Punishment	4	7
Intimidating	1	4
Organizing students' study	1	1
Referral to counselor	1	-

C. Solutions Offered:

Both groups of students offered a number of varied solutions to the described problem in each teaching case.

Table (12) and (13) reveal the most common solutions offered by teaching case. Concerning cases (1) and (2), the most frequent solutions offered by both groups that related to examination or changing of the methods of teaching and evaluation used by teachers. In case (3), the most frequent solutions offered by both groups were related to changing the management techniques used and the classroom instruction to be more engaging, interesting and motivating. Regarding case (4), the most frequent solution offered by both group were counseling students and reporting to school administration. In case (5), student in both group proposed that mathematical skills should be taught; however, they differed on whether skills should be taught before or through teaching the prescribed topics and whether the skills should be taught during the regular instruction time or during the extra time.

Table (12)
Most Frequent Solutions Offered By Fourth Year Students By Teaching Case

Case Number	Solution offered	Frequency
1	• Repeating the lesson • Examining • Changing technique of instruction or explanation • Discussion of student errors	5 10 5
2	• Revising technique of instruction • Changing form type of evaluation • Analyzing students' performance on tests	9 9 4
3	• Changing instructional technique • Engaging students in learning • Changing management techniques • Use punishment	4 5 5 5
4	• Counseling students • Report the incident to administration • Punish the student	10 5 3
5	• Teach Skills • Teach Skills during regular hours of instruction • Teach skills outside regular hours of instruction • Teach skills then prescribed topics	6 4 4 5

Table (13)
The Case Most Frequent Solutions Offered By First Year Students By Teaching

Case Number	Solution offered	Frequency
1	• Repeating the lesson • Examining/ revising instruction • Revise instruction and evaluation	7 11 4
2	• Revise Instruction • Revise instruction and evaluation • use different types of questions	7 8 6
3	• Changing instruction to be engaging • Change management techniques • Punish students	6 7 5
4	• Counseling Students • Report to administration • Understand causes of cheating	11 6 4
5	• Teach skills • Teach skills during regular hours • Teach skills outside regular hours • Teach skills through teaching topics	10 10 11 3

d. Arguments constructed by students:

Students were asked on the questionnaire to provide justifications for their proposed solutions to the problems presented to them in the five teaching cases. In accordance with the analytic framework discussed above, we envisage the process of justifying the proposed solution as entailing linking the proposed solution with knowledge elicited and critical variables identified in such a way as to build up an argument that lends reasonable support to the proposed solution. Following this line of thinking, our concern in this part of data analysis centered on identifying the types of argument constructed by students and on evaluating their strengths or validity. It is worth mentioning in this regard that many of the arguments provided by students were either incomplete or implicit in their written responses; therefore, we did our best to reconstruct those arguments very precisely.

Three types of arguments emerged in our analysis: deductive, causal or analytical and anological. The deductive arguments that we could identify were of the conditional or syllogistic form. In those arguments, a conclusion (i.e. the proposed solution) seemed to be logically derived from some rules or principles (one or more).

In some cases, the logical derivation appeared to be valid and in other cases, the derivation was indeed false. Almost all students who used deductive arguments to justify their proposed solutions were among those students who chose to perceive and interpret the problematic teaching situation through using only one aspect (i.e. One critical variable).

The causal arguments that we could identify were generally very weak. In those arguments, two or more causes of the problem under consideration were mentioned without defining clearly their nature or specifying explicitly their relationship to the problem. Students who provided causal arguments to support their proposed solutions were often among those who looked at the problems from two sides or more (i.e. who used two variables or more in interpreting the problems).

Analogical arguments were very rare. Only one fourth year student provided an analogical argument to support his solution to the problem in case(3). That student likened the problem in case(3) to a precedent case, thus proposing a solution similar to that used in the analogous case.

Table (14) shows the distributions of fourth and first year students by the type of argument. A considerable proportion of fourth and first year students did not provide any argument to support their solutions to the problems presented. That proportion for fourth year students ranged from a minimum of about 17% to a maximum of about 29%; the corresponding proportion for first year students ranged from 20%. to about 30%.

As table (14) clearly shows, in case (1), most of the arguments provided by fourth and first year students were of the causal type. As one moves from case (1) to case (5), the frequency of causal arguments started to decrease while that of deductive arguments began to increase, Thus, in case (5), all arguments provided by students in both groups were of the deductive type. This pattern of variation seemed to be related to the nature of the problems in the teaching cases presented to students.

A comparison of the two distributions of fourth and first year students by teaching case was made using the x^2 test. The results of x^2 tests showed no significant differences (P<.05) in all teaching cases.

Table (14)
Distributions of Fourth and first year Students
By The Type Of Argument And By Teaching Case

			Type Of argument			
Case Number	Group	K^2 Walue	No argument	Deductive	Causal	Analogical
1	Fourth	0.84	6	5	13	-
	First		7	11	17	-
2	Fourth	<<1	7	8	9	-
	First		9	13	13	-
3	Fourth	0.67	4	13	6	1
	First		9	19	7	-
4	Fourth	0.45	5	17	2	-
	First		10	24	1	-
5	Fourth	0.45	5	19	-	-
	First		10	25	-	-

Discussion of Findings And conclusions:

This study was done to explore changes in pedagogical thinking of student teachers as a result of their coursework in the teacher education programs. Pedagogical thinking was defined in the study as the ability to interpret and resolve teaching problems included in practical teaching situations. four aspects of pedagogical thinking were identified in the stydy (a) the number and quality of variables used in analyzing the teaching problem; b) the quality of knowledge elicited in resolving the problem; (c) the quality of solutions proposed to the problem; and (d) the type and strength of arguments constructed to support the proposed solutions. These four aspects of pedagogical thinking, though separated for analytical purposes, are indeed interrelated.

Students' responses to the five teaching problems (i.e. teaching cases) presented were analyzed using the four aspects of pedagogical thinking above. Fourth and first year students were then compared on these four aspects or pedagogical thinking to explore and identify any changes.

With regard to the first aspect (i.e. variables used in analyzing the teaching problems), it was found that both groups of students used a large and almost equal number of variables, and that twelve of those variables were common to both groups. However, most variables mentioned were of low frequency and did not seem to be clearly characterized, The most frequent variables mentioned by both groups were ineffective instructional techniques, use of inappropriate form of evaluation of students' learning and students' preparation for tests. It was also found that on the average (i.e over all teaching problems) about half of students of both groups elicited only one variable in analyzing the teaching problems and about one quarter did not elicit any variable. In two of the five teaching problems, more fourth year students than first year seemed to use two or more variables in analyzing problems.

The results of analysis of data on this aspect seemed to indicate little changes between both groups of students. concerning the second aspect of pedagogical thinking (i.e. quality of knowledge elicited), The comparison of both groups seemed to indicate some changes in kind of knowledge used. Regarding factors influencing learning, first year students seemed to give more importance to methods of instruction than fourth year students did. Concerning characteristics of good teaching fourth year students seemed to emphasize more the importance teacher's use of feedback more than first year students. First year Students more than first year students emphasized the role of individual differences in good evaluation of students' learning, the need for training students on different types of test questions to improve their performance on tests, use of punishment in dealing with students' inattention and advising students as a means to reduce cheating in examinations. These differences between both groups of students did not seem to provide a consistent pattern.

Concerning the type of arguments used, no difference was found between both groups of students.

Concerning quality of solutions proposed to teaching problems, no clear-cut differences between both groups seemed to appear.

Based on findings mentioned above, both groups seemed to differ slightly on their pedagogical thinking. It thus could be concluded that student teachers learning and experiences in coursework of the teacher education programs did not seem to influence significantly and consistently students' pedagogical thinking. This conclusion is consistent with findings from other research on the effect of coursework on pedagogical thinking of student teachers (e.g. Borko putanam, 1996; Bork, 1989).

Inquiry into "Teaching cases" seems to be missing from the teacher education programs at the University of Jordan. "Inquiry into teaching" seems to be a promising method to develop the pedagogical thinking of students (Harviagton and Garrison, 1992). Colleges of education at Jordanian Universities are invited to consider the introduction of this method in their teacher education programs and think seriously of reasoning their programs to develop in their student teacher pedagogical reasoning i.e the ability "to learn to teach".

References

A Rexander, P. and Dachy, F. (1995). conceptions of knowledge and beliefs: A comparison among varying cultural and educational communities. American Educational Research Journal, 32(2), 413-442.

Anderson, charles (1989). The role of education in the academic disciplines inteacher preparation. In Anita Wooltolk (Ed.), Research Perspectives on the Graduate Preparation of Teachers. Englewood cliffs, N.J: Prentic-Hall.

Borko, Hildu (1989). Research on learning to teach: implications for graduate teacher preparation. In Anita woolfolk (Ed.), Research Perspectives on the Gradate Preparation of Teachers. Englewood cliffs, N.7.: Prentice-Hall.

Borko, H. putnam, R. (1996). Learning to teach. In David Berliner and Robert calfee (Eds.), Handbook of Educational Psychology. New York simon & schuster, Macmillan.

Calderhead, J. (1996). Teachers: beliefs and knowledge. In D. Berliner and R. calfee (Eds.), Handbook of Educational Psychology, New York:
simon & schuster macmillan.

Good, Thomas (1990). Building the knowledge base of teaching. In david dill and associates (Eds.), what teachers need to know. San Francisco: Jossey-Bass.

Harrington, H. Garrison, J. (1992). Cases as shred in Buiry: a dialogical model of teacher preparation. American Educational Research Journal, 29(4): 751-735.

NEW ROLES OF JORDAN TEACHERS IN SCHOOL REFORM

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INTRODUCTION

Today, we are living in an era of transformation, changing from an industrial-based society to a technological-and knowledge-based society. Education and teachers are major agents in this transformation. Unique about the current age of transformation is the rapidity with which change is occurring and the environment in which it is occurring. The world is now more intercultural and interdependent than ever before.

Societies throughout the world are dependent upon skills and knowledge that go beyond the traditional educational basis. People now are required to think critically, learn constantly, and appreciate, understand and adapt to the role that technology has in shaping and reshaping their personal and professional lives.

As a result of this transformation, roles of teachers are changing dramatically. Traditionally, they have to perform a variety of roles-teacher, nurse, counsellor, disciplinarian, mediator, surrogate parent and so forth. Teachers must now have the knowledge, confidence, and resources to ensure that schools become learning communities. This means that teachers must instil in students a love of learning that provides them with the foundation to be active, lifelong learners (EFA 2000, 1996).

Learning is the new form of labor. Thus, in learning communities, teachers must model lifelong learning. They, too, must acquire the knowledge and pedagogical skills necessary to prepare students to live in a highly technological, intercultural and global society.

The current isolationist model of teaching must be abandoned in a favor of a more democratic and interdisciplinary model. But the national and local communities must provide teachers with the necessary training and flexibility so that this transformation can be accomplished successfully. Today, teachers are being asked to warrantee that students achieve at higher academic levels. Higher standards, especially in subject-matter courses, are one of those demands. More often than not, teachers have been excluded in the development of any academic standards and curriculum frameworks, which they then must implement.

It is important, too, for teachers to have an understanding of the relationship of technology to the content-specific, subject-matter courses. Learning and teaching, well-integrated uses of technology and school restructuring are inter woven. This means that teachers must be provided with, and have access to, the necessary technological equipment, training and resources that will in enriched student learning and a charged school culture.

Teachers' roles are also evolving because of the dramatic changes evident in the student body of schools. Exceptional students with special needs, students who do not speak a common language, students from single-parent families and growing numbers of economically poor students college the traditional role of teachers. This means that teachers must use a wide repertoire of teaching styles in order to reach, motivate and teach each of these young people.

Teachers must also assume leadership roles in their communities. They must persuade governmental and non-governmental agencies of the value-added effect of investing in an education for all citizens, especially children.

The link between educational quality and teacher qualifications is widely assumed, but despite efforts by governments to upgrade qualifications of teachers, in nearly one-fourth of sixty-three countries surveyed by UNESCO in 1992, one out of four teachers was "untrained" (EFA 2000, 1996). A 1993 UNICEF report, "reaching the un -reached", states that capacity building and training of personnel in planning, administration, pedagogy, curriculum, supervision and evaluation are "neglected areas".

Rapid technological development and the spread of non-conventional learning involving distance teaching, and non-formal education added new skills to be accomplished by teachers. According to the report of the International Commission on Education for the Twenty-first Century, "" The world in general is evolving so rapidly today that teachers, like most other professional groups, now must face the fact that their initial training will not see them through the rest of their lives: They need to update and improve their own knowledge and techniques through their lifetime"".

Based on this, it could be concluded that exposing the teachers to a programmed training sessions dealing with competency development is so vital.

In Jordan, Ministry of Education (MOE) started its teachers' training programs since its existence. Training is of two kinds, pre-service and in-service. The training center in MOE arranging and managing all training sessions for teachers and supervisors based on their real needs (Battah, Fraijat, & Billeh, 1992). While the pre-service teacher education programs are run by the faculties of education in some public Jordan universities (Jordan, Yarmouk, Mu'tah, Hashemite). These programs have been launched based on the recommendations of the first National Conference for Education Reform that held in 1987 under the patronage of His Majesty, king Hussein, and followed up thoroughly by His Royal Highness the Crown Prince Al-Hassan.

Jordan manages a project for improving the teacher education programs in four public universities (Jordan, Yarmouk, Mu'tah, The Hashemite). This project started in April, 1996, it aims at train the Jordan educational supervisors in Jordan and in Europe. In addition, enhancing Jordan's institutional capacity and more than 35 fellowships to get MA's and PHD's in teacher education will be financed by this project.

Statement of the problem

Human resources are the dominant element in any reformation process in planning, production and development. In Education, teachers are the fundamental tool of change, a change which could be controlled by either teacher's thinking and or his performance. So the school is considered as an efficient model for change if it includes elite human beings as teachers (Conley, Bacharach, & Bauer, 1989).

This study is expected to offer the educational planners and decision makers with a better status about the teacher education programs in Jordan. The importance of this study deduced from the limited available number of studies that deal with teacher eduissues in the country.

Study Objectives and Questions

The main purpose of this study is to identify the efficiency of the pre-service teacher training programs (class teacher program and field teacher program) at Jordan public universities in preparing teachers to have the expected and needed roles as technologists, evaluators, researchers, innovators, and social changers. In summary, the study is going to answer the following two research questions:

1. To what extent that the current teacher training programs at public Jordan Universities are capable in empowerment of graduates to be technologist, evaluator, innovator, researcher, and social changer teachers?

2. How these roles differ by gender and type of program?

Instruments

Fifty eight items have been developed to cover the five mentioned dimensions the teachers in teacher education programs are expected to fulfil. Psychometric indices and some validation procedures have been taken care to warrantee the reliability, simplicity and validity of this tool. The whole instrument is shown in Appendix I.

Operational Definitions:

Some terms have been appeared in this study, these are their operational definitions:

Class Teacher: A teacher who teaches all subject matters to students from grade 1 to grade 4.

Field Teacher: A teacher who teaches specific subject matter to grade 5 to 10. like science field teacher, math or arabic field teacher.

Teacher as a technologist: A teacher who has the competencies: 1, 6, 11, 16, 21, 26, 31, 36, 41.

Teacher as an evaluator: A teacher who has the competencies: 2, 7, 12, 17, 22, 27, 32, 37, 42, 46, 50, 52, 54, 56, 58.

Teacher as an innovator: A teacher who has the competencies: 3, 8, 13, 18, 23, 28, 33, 38, 43, 47.

Teacher as a researcher: A teacher who has the competencies: 4, 9, 14, 19, 24, 29, 34, 39, 44, 48, 51, 53, 55, 57.

Teacher as a social changer: A teacher who has the competencies: 5, 10, 15, 20, 25, 30, 35, 40, 45, 49.

Sample and population

The population of this study consists of 900 students who are expected to graduate at the end of the academic year 1996/1997 distributed over University of Jordan (360), Yarmouk University (320), Mu'tah University (220).

A stratified random sample of 300 students has been selected. Table 1 shows the distribution of study sample subjects by university and program and gender.

Table (1)
Distribution of sample subjects by University, Program and Gender

University	Field Teacher		Class Teacher		Total
	Male	Female	Male	Female	
Jordan	45	39	10	16	110
Yarmouk	1	5	12	91	109
Mu'tah	5	25	11	40	81
Total	51	69	33	147	300

Study Results and Discussion

Each individual in the study sample exposed to the study tool, each one is asked to sign each competency the program offered to the students following a likert scale of 5 levels: **1=very low, 2=low, 3= medium, 4=high, 5= very high.**

To answer the study research question, simple descriptive statistics (number, mean, standard deviation) have been presented in table 2 through table 7. The mean of each role has been calculated by summing the responses on competencies of each role and divided by the number of competencies. The analysis has dealt by 287 subjects only. Table 2 shows the means and standard deviations of each role the program offer to students.

Table (2)
Descriptive statistics of the roles of teachers in Jordan

Role of Teacher	Number of Students	Mean	Standard Deviation
Technologist	287	3.12	1.00
Evaluator	287	3.18	0.88
Innovator	287	3.10	0.85
Researcher	287	3.11	0.83
Social Changer	287	3.15	0.93

The data in table 2 shows that the teacher education programs at Jordan universities offered roles of teachers ranked as 1: Evaluators, 2: Social changer, 3: Technologist, 4: Researcher and 5: Innovator respectively. Tables 3 to 7 will deal with each role and its competencies in some details:

724

Table (3)
Descriptive statistics for technology competencies

No.	Competency	Mean	Standard Dev.
1	Using learning technology equipment: over head projector, Microscope, Video and slide speakers	2.98	1.48
6	Production of simple education subject materials.	3.17	1.27
11	Functioning and utilizing the available raw materials in the environment to produce educational materials	3.18	1.33
16	Functioning the school radio and educational television to enrich students learning	3.17	1.38
21	Utilizing learning resource centers in teaching/learning process	3.08	1.22
26	Use of learning material in teaching	3.17	1.34
31	The contribution in arranging technical carnivals at school and/or directorate level	3.23	1.20
36	Master the basics of computer for teaching	3.04	1.43
41	Functioning the facilities of computer programs in reinforcing students learning	3.07	1.42
	Technologist	3.12	1.00

This table shows that all technology competencies have been offered in the teacher education programs in Jordanian universities in a medium highlight. Competency no. 31 which focuses on arranging technical carnivals at school or directorate levels to show teachers and students products was the best competency being focussed on. Where competency no. 1 which speaks about using the technical aids in teaching/learning processes to achieve educational goals effectively was at the least interest.

Table no. 4 demonstrates descriptive statistics about the competencies related to teacher as an evaluator at the Jordan concerned universities.

725

Table (4)
Descriptive statistics for evaluation competencies

No.	Competency	Mean	Standard Dev.
2	Preparing diagnostic tests .	3.16	1.32
7	Estimating the psychometric indices of any achievement test.	3.16	1,25
12	Evaluating the students performance to achieve educational goals.	3.31	1.26
17	Analyze test items indices like difficulty and discrimination indices	3.07	1.25
22	Scan and clean educational data to have meaningful interpretations.	3.13	1.14
27	Use several evaluation techniques to assess all students learning facets.	3.33	1.24
32	Informing students how their achievement is going to be evaluated.	3.24	1.28
37	Use of tables of specifications for achievement test construction.	3.01	1.30
42	Develop examinations that measure learning cognitive, affective and psychomotor objectives.	3.22	1.33
46	Prepare the examinations that measure the critical thinking and creativity.	3.22	1.33
50	Selecting the standardized tests to be used in class settings	3.16	1.11
52	Identify the formative evaluation techniques.	3.13	1.20
54	Utilizing the systematic class observing techniques to assess the class interaction.	3.20	1.22
56	Using achievement tests to evaluate students performance based on assigned-mastery levels not norm-based levels.	3.15	1.22
58	Using achievement tests to provide useful feedback	3.22	1.38
	Evaluator	3.18	.88

726

This table shows the means of the competencies ranges from 3.01 to 3.33. In addition, all means fall in a medium level. The competency no. 27 which is concerned by efficiently using different varieties of evaluation techniques to assess all student learning abilities stands at the highest order. Where competency no. 37 is of the least mean value, it's content dealt with using efficiently tables of specification for achievement test construction.

Table no. 5 shows the descriptive statistics of competencies related to teacher's role as an innovator.

Table (5)
Descriptive statistics for innovation competencies

No.	Competency	Mean	Standard Dev.
3	Following system approach in developing Jordan Education system	3.07	1.18
8	Adopt flexible strategies to fulfil changing current and future needs for teachers and students.	3.16	1.21
13	Adopting educational research and studies as bases for innovation and educational development in Jordan	3.05	1.13
18	Effectively using the updated education data base systems to enhance decision making in Education.	3.06	1.14
23	Follow a long term planning methodology to face educational problems.	3.12	1.22
28	Teacher education programs are linked with eneeds of the Ministry of Education	3.23	1.22
33	Developing the awareness of any new educational trends (Individualized, self, continuous, open and comprehensive learning)	3.12	1.23
38	Taking care of the unfortunate groups of students (women, old, talented, handicapped)	3.11	1.24
43	Develop the awareness of the integration between formaland non-formal education to achieve Jordan educational goals	3.07	1.13
47	Adopt the initial scientific trial for any educational innovation before generalizing	3.04	1.25
	Innovator	3.10	.85

This table displays that the mean for these competencies ranges from 3.04 for competency no. 47 to 3.23 for competency no. 28. Keeping into consideration that all competency means were at the medium level. Competency no. 28 was concerning with the extent of linkage of teacher education programs with Ministry of Education needs that fit the Education Reform Plan. Initial experimentation of any educational innovation before generalizing is not focused on in the teacher education programs at concerned universities as mentioned in competency no. 47.

Table No. 6 exhibits the basic statistics about the competencies concerning the teacher's role as a researcher.

Table (6)
Descriptive Statistics for research competencies

No.	Competency	Mean	Standard Dev.
4	Identify and reform educational problems in a researchable fashion.	3.23	1.27
9	Classifying study variables	3.05	1.17
14	Drawing research questions and hypotheses in a testable fashion.	3.21	1.11
19	Classifying and selecting research studies (descriptive,experimental, basic and applied)	3.01	1.23
24	Develop appropriate data collection techniques	3.06	1.13
29	Assess the quality and efficiency of study tools	3.18	1.18
34	Prepare study tools to facilitate individuals' responses	3.10	1.20
39	Drawing representative study samples	3.15	1.19
44	Select the efficient and powerful statistical techniques	3.09	1.16
48	Tabulating collected data in computerized form	3.14	1.18
51	Conducting the fitted statistical analysis	3.03	1.16
53	Drawing the study recommendations	3.11	1.18
55	Suggest a plan on disseminate research results to interested agencies	3.06	1.22
57	The efficiently investment of research findings to improve class teaching	3.10	1.26
	Researcher	3.11	.83

This table shows that the means of these competencies range from 3.01 of competency no 19 to 3.23 of competency no 4. Competency no 19 describes the student's ability to classify research (descriptive, experimental, basic, applied), where competency no. 4 relates to the ability to identify and formulate research issues in a researchable fashion.

Table No. 7 displays the descriptive statistics of competencies related to teachers's role as a social changer.

Table (7)
Descriptive Statistics for social changer competencies

No.	Competency	Mean	Standard Dev.
5	Jordan society needs assessment and act how to satisfy.	3.12	1.28
10	Managing students and parents seminars and activities to control their awareness to the socio economic problems the Jordan society suffer.	3.02	1.28
15	Designing students oriented programs and activities on how to identify and utilize available local societal resources to understand social changes.	3.18	1.26
20	planning for programs to empower students to contribute in human and social services to local community and interact with public and private institutions.	3.10	1.24
25	Utilize available education data base to quid students toward careers that needed by the Jordan socio-cultural development Strategies.	3.08	1.25
30	Developing the communication and debate skills with students and their parents.	3.16	1.34
35	Developing the strategies of the bridging ways between school and the community	3.15	1.23
40	Developing techniques for enhancing students' creativity	3.25	1.29
45	Suggesting the suitable ways to invest the available resources in the environment and community to enrich the role of school as a leading agency	3.13	1.13
49	Encouraging the participation in democracy and human rights activities	3.33	1.25
	Social Changer	3.15	.93

This table shows that the means for these competencies ranges from 3.02 of competency no 10 to 3.33 of competency no 49. Competency no. 10 concerned with the ability of arranging activities and seminars for students and their parents to increase their awareness of social and economic problems the society suffer from. Where Competency no. 49 focussed on the contribution in activities of democracy, human rights, and instituitionality. All means indicate that all competencies are at a medium interest by the teacher education programs in the concerned Jordan universities.

In summary, it has shown that all competencies are at the medium level of concern, regardless of its loyalty to any of the interested teachers' roles. It is concluded that teacher education programs at Jordan universities exhibits medium emphasis on the new intended roles the teachers that are expected to fulfill.

To investigate whether the roles of Jordan teachers are different by the interaction of gender and the program, 2x2 Two-Way MANOVA has been run. A table no. 8 shows the results.

Table (8)
MANOVA results of the interaction between Gender and program type

Role	Hypoth. SS	Error SS	Hypoth. MS	Error MS	F	Sig. of F
Technology	.0147	269.44	.0147	.952	.0154	.901
Evaluator	.0145	209.43	.0145	.740	.0197	.888
Innovator	.0482	194.12	.0482	.685	.0703	.791
Researcher	0.137	191.62	0.137	.677	.2023	.653
Social Changer	0.068	236.82	0.068	.836	.0818	.775

From this table, it is concluded that the roles of teachers are not different significantly by interaction between gender of students and the type of training program. Following this statistical analysis, an inspection the main effect of gender and program separately was done, and it found that the program of field teacher stressed these roles better the class teacher program regardless the student gender.

RECOMMENDATIONS

Based on the results of the current research, the following recommendations could be expressed:

1. Based on the dramatic changes that took place in the Jordan society in cultural, social, scientific and technological domains, the comprehensive review of all courses and teaching/learning plans in education programs is a must.

2. The developing and designing the teaching plans courses in faculties of education in Jordan universities to fit the innovative training needs in complying with the Educational Reform Plan (1989 - 1998).

3. Offering and advocating of new courses like technology of learning, computer and research, educational innovation and school reform, performance evaluation and community school.

4. The legislation controlling the teaching/learning plans in faculties of Education should be flexible, in order to offer new courses as independent studies that fit any sudden changes that affect the roles of teachers.

5. The teacher education plans should aquire a competency-based training approach rather than the conventional theory-based approach, due to the fact that the competency based approach has proven far better effecting than the theory approach.

References

Andrew, Michael. The University of New Hampshire's. Five Year Teacher Education Program. A state Report After 12 Years (1974-1986).

Commonwealth Secretariat. (1974). Teacher Education In a Changing Society. London: Commonwealth Secretariat. P 108.

Battah, A.; Fraijat, G. and Billeh, V. (1992). The status of Education in Jordan. NCERD Publications, Al-Jubaiha, Jordan.

Conley, S .; Bacharach, S. and Bauer, S. (1989). The school work environment and teacher career satisfaction, Educational Administration Quarterly, 25 (1), 58-81.

EFA 2000. (1996). Teaching against the Odds. Bulletin Published by UNESCO, April-June.

Ellerman, Gary. (1986). A Model for Integrating Global Education in a Teacher Education Program. Paper presented at the World Assembly of International Council on Education for Teaching, 33rd, Kingston, Jamaica, July 20-24.

Gurrey, P. (1963). Education and the Training of Teachers. London: Longman.

Heberman, Martin. The Dimensions of Excellence in Programs of Teacher Education. Paper presented at the Annual Conference on Alternative Certification (Ist, South Padre Island, Texas, 10-12, 1991).

Hilliard, F. H. (1971). Theory and Practice in Teacher Education Teaching The Teachers: trends In Teacher Education. London. Urusin.

Hughes, Jeffry and Others. (1993). The Task Force on Initial Teacher Education Programs. Final Report, Monitoba University, Winnipeg.

Sinnet, T. M. and Hugget, Albert, J. (1963). Professional Problems of Teachers. New York: Mc Millal, PP: 56 - 57.

Smith, Elmer. R. (1963). Specialized Knowledge. New York: Macmillan.

Toffler, Alvin. (1974). Learning for Tomorrow: The Role of the future in Education. New York: Vintage Books.

UNESCO, Sector of Education. (1992). Education and Learning for the Twenty-First Century. Discussion paper for the commission on Education for the Twenty-First century, 15, september..

UNICEF. (1993). Reaching the Un-Reached.

Appendix I

These are the competencies the Teacher Education Programs at your university is expected to offer. Please tick the number of your case, keeping in mind that the degrees of program's focus is changing from 1: very low, 2: low, 3: medium, 4: High, 5: very high.

No	Competency	1	2	3	4	5
1	Use of learning technology equipment:over head projector, Microscope, Video and slides					
2	Prepare diagnostic tests					
3	Follow system's approach in developing Jordan Education system					
4	Identify and reform educational problems in a researchable fashion.					
5	Assess the Jordan society needs and suggest how to fulfil					
6	Producing of simple education subject materials					
7	Estimating the psychometric indices of achievement test					
8	Adopt flexible strategies to fulfil changing current and future needs for teachers and students					
9	Classify study variables					
10	Managing students and parents seminars and activities to control their awareness to the socio-economic problems the Jordan society suffer					
11	Functioning and utilizing the available raw materials in the environment to produce educational materials					
12	Evaluate the students performance to achieve educational goals					
13	Adopting educational research and studies as bases for innovation and educational development in Jordan					

No	Competency	1	2	3	4	5
14	Stating the research questions and hypotheses in a testable fashion.					
15	Design students oriented programs and activities on identifying and utilize available local societal resources to understand social changes.					
16	Functioning the school radio and educational television to enrich students learning					
17	Analyze test items indices like Difficulty, discrimination, distractors indices					
18	Effectively use the updated education data base systems to enhance decision making in Education					
19	Classify and select research studies (descriptive,experimental, basic and applied)					
20	planning for programs to guide students to contribute in human and social services to local community and interact with public and private institutions					
21	Utilize learning resource centers in teaching/learning process					
22	Scan and clean educational data to have meaningful interpretations					
23	Follow a long term planning methodology to face educational problems					
24	Develop appropriate data collection techniques					
25	Utilize available education data base to quid students toward careers that needed by the Jordan socio-cultural development Strategies					
26	Use of learning material in teaching					
27	Use several evaluation techniques to assess all students learning facets					
28	Teacher education programs are linked with education needs of the Ministry of Education					

No	Competency	1	2	3	4	5
29	Assess the quality and efficiency of study tools					
30	Developing the communication and debate skills with students and their parents					
31	The contribution in arranging technical carnivals at school and/or directorate level					
32	Inform students how their achievement is going to be evaluated					
33	Developing the awareness of new educational trends (Individualized, self, continuous, open and comprehensive learning)					
34	Prepare study tools to facilitate individuals' responses					
35	Develop the strategies of the bridging ways between school and the community					
36	Master the basics of computer for teaching					
37	Use of tables of specifications for achievement test construction					
38	Taking care of the unfortunate groups of students (women, old, talented, handicapped)					
39	Draw representative study samples					
40	Develop techniques for enhancing students' creativity					
41	Functioning the facilities of computer programs in reinforcing students learning					
42	Develop examinations that measure learning cognitive, affective and psychomotor objectives					
43	Develop the awareness of the integration between formal and non-formal education to achieve Jordan educational goals					
44	Select the efficient and powerful statistical techniques					

No	Competency	1	2	3	4	5
45	Suggesting the suitable ways to invest the available resources in the environment and community to enrich the role of school as a leading agency					
46	Prepare the examinations that measure the critical thinking and creativity					
47	Adopt the initial scientific trial for any educational innovation before generalizing					
48	Tabulating collected data in computerized forms					
49	Encouraging the participation in democracy and human rights activities					
50	Selecting the standardized tests to be used in class settings					
51	Conducting the fitted statistical analysis					
52	Identify the formative evaluation techniques					
53	Drawing the study recommendations					
54	Utilizing the systematic class observing techniques to assess the class interaction					
55	Suggest a plan on disseminate research results to interested agencies					
56	Using achievement tests to evaluate students performance based on assigned-mastery levels not norm-based levels					
57	The efficiently investment of research findings to improve class teaching					
58	Using achievement tests to provide useful feedback					

ASSESSMENT OF THE PROGRAM FOR PREPARING ISLAMIC EDUCATION TEACHERS IN JORDANIAN PUBLIC UNIVERSITIES.

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INTRODUCTION

In 1992 , the government established the program for preparing Islamic education teachers within the faculties of Educational Sciences at the three pubic universities of Jordan, Yarmouk University, and Muta'a University.

The program aims at program aims at providing schools with qualified Islamic education teachers, implementing this goal by a two-pronged approach: students take religious studies courses from the Faculty of Shari'ah, and they take education science coursesfrom the Faculty of Educational Sciences.

Among government-supported universities, the Universities, of Jordan in Amman, Yarmouk University in Irbid, and Muta'a University in Karak have the program for preparing Islamic education teachers offered by their faculties of Educational sciences.

Since this program assumes entire responsibility for supplying all Islamic education teachers in the country, there is a need to assess this program to see how well it prepares its students to be teachers of Islamic eduction in schools.

The purpose for conducting this study was to assess the program for preparing Islamic education teachers at the three Jordanian public universities (University of Jordan, Yarmouk University, and Muta'a University). The assessment was based on perceptions of senior students who are almost finished with the courses and their experience as trained teachers gives them insight into the various aspects of the teacher preparation program, since teaching in the schools in a part of their preparation .

The following hypotheses were tested:

1. Based on the perceptions of senior students, at the .01 level of significance, there is no difference between current practice and what the practice should be regarding curriculum content in the program for preparing Islamic education teachers.

2. Based on the preceptions of senior students , at the .01 level of significance, there is no difference between current practice and what the practice should be regarding methods of teaching in the program for preparing Islamic education teachers.

3. Based on the perceptions of senior students, at the .01 level of significance, there is no difference between current practice should be regarding both curriculum content and methods of teaching in the program for preparing Islamic education teachers.

The importance of this study arises from three needs:

First, since the program for preparing Islamic education teachers assumes the entire responsibility for graduating Islamic education teachers for all schools in Jordan, there is a need to assess this program in terms of curriculum content and methods of teaching; this study may contribute to meeting this need.

Second, this study may lead to improvement in the preparation of teachers of Islamic education , which in turn may lead to an improvement in the teaching Islamic education in Jordanian primary and secondary schools.

Third, The results of this research may provide the planners and the designers of Islamic education programs in Jordanian public universities with specific information about the status of the program for preparing Islamic education teachers. This research may also help these planners and designers to improve Islamic education teaching in Jordanian schools.

Review of Literature

There are many studies that examined different aspects of teaching religion in schools. Al-Shafei (1984) studied some of the problems that have faced religious education courses in the schools. He surveyed 100 teachers in Saudi Arabia. Al-shafei's study indicates that religious education has encountered some difficulties.

Many of the traditional goals of Islamic education, such as meeting the needs of students and providing practical yet spiritually valid ways to solve daily problems, are not being met.

Al-Meajel (1992) studied the effectiveness of the Islamic curriculum in middle schools for boys in Riyadh, Saudi Arabia, as perceived by principals , supervisors, teachers, and students.

The study's analysis of the data showed that the methods of teaching religious education in Riyadh were ineffective in terms of student achievement , and that the design and format of textbooks did not facilitate learning; in addition to this, the content of the curriculum was too difficult for the age level of the students. Finally, there was also a lack of effective communication between students and teachers.

Al-Meajel's recommendations mention teacher methodologies and curricula that would encourage students' personal growth and support students' desires to study religion. Al-Meajel also recommended increased emphasis on memorization of the Koran and Hadith.

Al-Daood (2983) surveyed all faculty members and a sample of senior students at Imam Mohammed Ibn Saud Islamic University in Saudi Arabia in order to isolate problems concening the curriculum, instruction, and quality of education.

Based on a statistical analysis of data collected, the preceding study concluded that the educational curriculum is not effective. The study also found that, there was no significant difference in the opinions of faculty and students concerning the effectiveness of the educational curriculum.

Luttfey (1986) conducted a study on training and developing the skills of Islamic educaion and Arabic languaged teachers. This study focused on practical training designed to develop classroom teaching skills. This study made the following observations regarding the current status of Islamic education in the population surveyed. Most of the teachers of Islamic education were functioning at below their actual skill level, either in the practical aspect or the professional aspet, the curriculum of the colleges for preparing Islamic education teachers did not include new studies or materials and teachers of Islamic educattion need more focus on specialized courses.

The population of the present study consisted of all senior students enrolled in the program for preparing Islamic education teachers in the faculties of educational sciences during the 1995-96 academic year at the three Jordanian public universities: the University of Jordan, Yarmouk University, and Muta'a University.

The instrument used for the present study is a 40-item needs assessment survey. Each item of the survey is divided into two parts: a "what is" response for the respondent's assessment of the current situation, and a " what should be" response which expresses the desired situation regarding the item in the program for preparing Islamic education teachers. The difference between the two responses on each item explain the discrepancy between the present situation and the desired situation in the program, with specific attention being given to curriculum content and instructional methods.

The researcher used the following procedures to carry out the study:

1- Developed the needs assessment questionnaire specifically for the purposes of this study. Needs assessment was the procedure for gathering information on the current status of the program for preparing Islamic education teachers, and for comparing its present status with the desired situtation.
2- Conducted a pilot study , administering the questionnaire to a small group from the College of Educational Sciences at Yarmouk University to determine the reliability of the instument . A "test-retest" procedure was used, and the instument was found it to be reliable.
3- Sent the questionnaire to the study sample. Responses were scored and each subject assigned a score representing his or her response.
4- Data analysis: For analyzing the data, the researcher used the appropriate statistical analysis, which was divided into two categories: Descriptive statistics and inferential statistics.

To answer the questions of the study, descriptive statistics were used in order to find the means of "is", the means of " should be", and the mean discrepancy scores for each item in the currentsituation "is" and in the desired situation " should be". Also, inferential statistics(t-test) were used to test the hypotheses of the study.

RESULTS AND DISCUSSION

(1) Results Concerning Curriculum Content

Table I shows the means for "is" , the means for" should be" and the mean discrepancy scores for the "is" and " should be" responses to items 1-20 of the survey.

Based on the data presented in Table 1, the mean discrepancy ranges from 0.95 to 2.49, which displays that the students perceived a need for greater attention in all items included in the curriculum content in the survey. Therefore, the researcher will analyze the data regarding the items based on the mean discrepancy of the item between the current situation and the desired situation, taking items in the order of their discrepancy scores.

The highest level of need for improvement was seen in the responses to item5. The mean discrepancy between the " is " and " should be" answers on this item was 2.49, indicating that the respondents perceived the need for focusing on reciting the Quran with Tajweed. This response is troubling in light of the fact that recitation of the Quran according to the rules of Tajweed is one of the main purposes of religious education in Islam (Al-Shafei, 1984). Prospective teachers who intend to give religious instruction must be able to recite the Quran accurately yet the survey shows that the majority of the respondents do not believe they are receiving sufficient training in this area.

Regarding item 11, providing prospective teachers of Islamic education with enough information about different Islamic subjects is intended to help them avoid problems in teaching these subjects in the classroom. The mean discrepancy for this item was 2.04(the second highest discrepancy score). The students surveyed felt a need for greater emphasis being placed on information about studying different Islamic subjects, especially that the textbooks and curriculum of Islamic education cover a wide variety of topics. Al-Meajel (1992) concluded that religious education is not presented to students in an effective manner , and that the content and design of religious textbooks should be changed.

Attention is also needed regarding item7, The discrepacy between the means on this item was 1.98 (the third highest score) .Fiqh is Islamic Jurisprudence, the basis for making legal judgments within the religion of Islam and how to deal with practical issues such as property rights. Students must know the theory and practice of Islamic jurisprudence and how scholars employ the resources of shari'ah such as Quran and Hadith to render Islamic judgments. Al-Meajel(1992) recommended that the religious education curriculum should include activities that the students find stimulating and relevant to their daily lives; it would appear that this recommendation is being followed, at least to some extent, in the current program. Researchers and prospective teachers are in agreement that practical aspects of Islamic education such as employing fiqh are important for preparing teachers.

Item 18 requests student perceptions on " information about the social system in Islam." The mean discrepancy was 1.89 (the fourth highest score) , which indicated a need for inprovement. Such information is of great importance for prospective teachers of Islamic studies because it relates religion to students' daily lives.It is particularly important in a country like Jordan, where the social system is mainly derived from the religion of Islam.

"Encouragement of tolerance for other religions"(item 10) had the lowest mean discrepancy score of 0.94. This score could indicate either of two possibilities: that this topic is already being dealt with in the program to a satisfactory degree, or that students are not interested in learning about other religions. In the researcher's personal experience, the study of other religions has two porposes: to learn about other faiths, and the better understand Islam itself in light of other religions. However, it should be noted item 10 had the second lowest perceived need with a mean of 3,63.

Thus, the low mean discrepancy score may reflect a combination of the two possibilities listed above. Student responses here may also in part reflect Islam's traditional respect for and tolerance of other religious views.

Concerning duplication of courses, item 13 had a mean discrepancy score of 0.95 and the lowest perceived need with a mean of 3.56. The students appeared to feel that there was little or no duplication among courses or that duplication is appropriate.

It is also possible that program developers designed the courses in sequence to avoid duplication of courses.

Item 4 and item8, these items showed mean discrepancies of 1.31 and 1.36, respectively. With regard to elements of the curriculum, developing written skills in

Table (1)

Needs assessment regarding curriculum content for the Islamic education program based on the perceptions of senior students.

Item	Mean Is	Mean Should Be	Mean Discrepancy
1- New textbooks for the courses offered in the program	2.59	4.09	.50
2- The Islamic point of view on different daily life issues.	2.80	4.46	1.66
3- Information on how todevelop verbal skills in the Arabic language	2.58	4.26	1.68
4- Information on how todevelop written skills in the Arabic language	2.69	4.00	1.31
5- Information on how to recite the Quran with Tajweed	2.14	4.63	2.49
6- How to interpret the verses of the Quran according to the rules of interpretation	2.77	4.46	1.69
7- Employing the Islamic fiqh in different life issues	2.38	4.36	1.98
8- Courses about the nature of teaching Islamic education in schools	2.80	4.16	1.36
9- Information about contemporary issues.	2.58	4.07	1.49
10-Encouragement of tolerance for other religions	2.69	3.63	0.94
11- Providing for students' interests in studying different Islamic subject	2.14	4.18	2.04
12- Encouragement for students to study society's needs and problems	2.77	4.24	1.47
13- Courses do not duplicate each other	2.61	3.56	0.95
14- Information regarding the contents of courses is organized in sequence	2.67	4.21	1.54
15- Information about other religions and ideologies	2.13	3.88	1.75
16- Students are provided with different sources and references in Islamic education	2.58	4.23	1.65
17- Students are provided with information related to the Hadith and its books	2.83	4.52	1.69
18- Information about the social system in Islam	2.32	4.21	1.89
19- Information about how other cultures view Islam	2.83	4.40	1.57
20- Studying about the leaders and scholars of Islam	2.46	4.24	1.78

Arabic needs to be improved but to lesser degree than other elements. It is in Arabic that students write out the verses of the Quran and Hadith, and it is in Arabic that they write their assignments and research papers.

Regarding item 8, students in this program visit schools as a part of their practical education , and so become familiar with the role of the Islamic education teacher in the classroom.

(2) Results Concerning Methods of Teaching

Based on the data presented in Table 2, the mean discrepancy ranges from 1.48 to 2.58, which displays that the students perceived a need for greater attention in all items included in the methods of teaching in the survey.

The highest level of mean discrepancy between the current and *ideal situations* occurred with regard to item 27 and item 23. Both of these items received a mean discrepancy score of 2.58, indicating that the students surveyed perceived a need for much improvement in these areas. Students appear to believe that instructional technology is becoming increasingly important in contemporary religious education.

Using computers to support instruction is currently a high priority in Jordanian education, though full realization of this goal is still sometime off in the future.

However, students are encouraged to use computers to supplement their learning process (Ministry of Education , 1994) . Regarding item 23, the researcher feels that educational films can be of great help in clarifying certain kinds of information, especially events the history of Islam such as battles. Thus, it is important for prospective teachers to be trained in how to use educational films in Islamic education courses.

Table (2) shows that on items 28 the students surveyed also expressed a perceived lack and need for improvement. The problem- solving approach makes the students the center of the teaching / learning process, encouraging them to ask questions, to find solutions or answers to many problems, and to develop higher-level cognitive skills.

Table (2)

Needs assessment regarding methods of teaching for the Islamic education program based on the perceptions of senior students

Item	Mean Is	Mean Should Be	Mean Discrepancy
21- How to organize cooperative learning activities	2.02	4.11	2.09
22- Students participate in group discussions	2.26	4.19	1.93
23- Appropriate use of educational films to train prospective teachers	1.56	4.14	2.58
24- How to prepare lesson plans	2.73	4.34	1.61
25- Opportunities for prospective teachers to practice teaching in the classroom	2.41	4.21	1.80
26- Courses in the methodology of teaching Islamic education	2.59	4.18	1.59
27- Appropriate use of technology in teaching Islamic education such as educational television and computers	1.51	4.09	2.58
28- Assistance for students to improve their skills in problem-solving	1.88	4.17	2.29
29- Focus on the self-learning approach	2.25	4.08	1.83

Cont. Table (2)

30- Use of the scientific investigation approach	2.18	4.13	1.95
31- Methods that increase students' motivation for learning	2.26	4.31	2.05
32- Instruction in different methods of evaluating students in the schools	2.33	4.19	1.86
33- Information about different learning theories	2.48	3.96	1.48
34- Development of student's skills in preparing and designing different instructional aids in teaching Islamic education	2.38	4.28	1.90
35- How to write appropriate behavioral objectives in teaching Islamic education	2.58	4.29	1.71
36- Reinforcement of positive attitudes toward teaching Islamic education	2.55	4.31	1.76
37- How to consider individual differences among students in the classroom	2.63	4.34	1.71
38- development of skills in asking different kinds of questions in the classroom	2.52	4.36	1.84
39- Employing different modern instructional approaches in teaching Islamic education	2.24	4.33	2.09
40- Use of different activities in teaching Islamic education	2.29	4.49	2.20

It is obvious that item 40 indicates a strongly felt need for improvement in the use of a variety of activities in teaching Islamic education. On item 21 and 39, the discrepancy score for both items, 2.09, shoed that senior students surveyed wishes for a change in the traditional routine of rote memorization and lectures out of textbooks in favor of an approach that would allow them to develop intellectually and improve their role within the classroom.

On item 33, the lowest discrepancy score occurring in the methods of teaching portion of the survey. There is a need for this item to be improved. However, a mean of 3,96 of should be on this item noted that the students felt the need is not of great importance. On item 26, a discrepancy score of 1.59 was reported. Responses to item 24, was also low, with a discrepancy of 1.61. item 35 and 37 both received discrepancy scores of 1.71. The preceding responses, taken together, indicate that there is less perceived need for improvement in these areas compared to the other items.

(3) Results Concerning the T-Tests

Significant differences were found between current and ideal practice at the 0.01 level in the curriculum content and in methods of teaching and in curriculum content and methods of teaching taking together of the program for preparing Islamic education teachers in favor of the ideal or desired situation, as can be seen in table 3, table 4 and table 5 respectively. Therefore, hypothesis one, hypothesis two and hypothesis three were rejected.

Table (3)
A comparison of the current situation ("is") and the desired situation ("should be ") regarding curriculum content.

Items 1-20	Is	Should be
Number of respondents	160	160
Mean	50.18	83.79
Standard deviation	8.73	6.34
Mean discrepancy	33.61	
t- value	*-48.96	
Probability	0.00	

** significant at the 0.01 level*

Table (4)
A comparison of the current situation ("is") and the desired situation ("should be") regarding methods of teaching

Items 21-40	Is	Should be
Number of respondents	160	160
Mean	45.63	84.48
Standard deviation	9.32	7.30
Mean discrepancy	38.85	
t-value	*-52.45	
Probability	0.00	

** significant at the 0.01 level.*

Table (5)
A comparison of the current situation ("is") and the desired situation (should be") regarding both curriculum content and methods of teaching

Items 1-40	Is	Should be
Number of respondents	160	160
Mean	95.81	170.65
Standard deviation	16.00	12.67
Mean discrepancy	74.84	
t-value	*-60.88	
Probability	0.00	

**significant at the 0.01 level.*

The main findings of this study were as follows:

1- Concerning curriculum content in the program for preparing Islamic education teachers, the following areas are perceived to be in greatest need of improvement:
  * Information on how to recite the Quran with Tajweed.
  * Providing for students' interests in studying different subjects.
  * Employing Islamic fiqh (jurisprudence) in different life issues.
  * Information about the social system in Islam

2- concerning methods of teaching in the program, the following areas are perceived to be in greatest need of improvement:
  * appropriate use of technology in teaching Islamic education
  * appropriate use of educational films to train prospective teachers
  * assistance for students to improve their skills in problem-solving
  * how to organize cooperative learning activities

3- There were significant differences found at the .01 level between the current ("is") and ideal ("should be") practice regarding the curriculum content, methods of teaching and both curriculum content and methods of teaching in the program for preparing Islamic education teachers in favor of the ideal situation.

RECOMMENDATION

Jordanian universities should revise the curriculum of the program in students' needs for educational growth, instructional materials and technology.

Curriculum designers should emphasize specialized courses, with particular focus on memorizing and reciting Quran with Tajweed, pay close attention to the practical aspects of Islamic education, and use of a variety of instructional methods in teaching. Instructors in this program should employ instructional aids in their classes, help prospective teachers learn how to use them,

Employ a variety of teaching methods and a variety of different learning activities to stimulate their students and help them to develop their intellectual skills.

References

Al-Daood, N.(1983). The effectiveness of the curriculum as perceived by faculty and students in the Department of Education ,Social Science College, Imam Mohammed Ibn Saud Islamic University. Published Doctor of Education dissertation, university of Northern Colorado.

Al-Meajel, T.(1992). Perception of the effectiveness of the Islamic curriculum in selected Suadi Arabian middle schools as perceived by administrators, teachers, and students. Unpublished Doctoral Dissertation, University of Southern California.

Al-Shafei, 1.(1984). Teaching methods of Islamic education. Kuwait: Alfalah Publisher.

Luttrey, M.(1986). The teacher of Islamic education and Arabic language. Proposal for his training and developing his skills. Tunis: the Arabic Organization for Education, Culture, and Sciences.

714

Answer Code:

1= Not at all 2=Very Little 3=Somewhat 4=Often 5=Very Much

Part One: Curriculum Content: (which means the content of the religious courses presented by teachers which may or may not be influenced by the instructional materials used in the program for preparing Islamic education teachers).

To what extent is/should each of the following items be included in the program for preparing Islamic education teachers?

1.	new textbooks for the courses offered in the program.	is	1	2	3	4	5
		Should	1	2	3	4	5
2.	the Islamic point of view on different daily life issues.	is	1	2	3	4	5
		Should	1	2	3	4	5
3.	information on how to develop verbal skills in the Arabic language.	is	1	2	3	4	5
		Should	1	2	3	4	5
4.	information on how to develop written skills in the Arabic language	is	1	2	3	4	5
		should	1	2	3	4	5
5.	information on how to recite the Quran with Tajweed.	is	1	2	3	4	5
		Should	1	2	3	4	5
6.	how to interpret the verses of Quran according to the rules of interpretation.	is	1	2	3	4	5
		Should	1	2	3	4	5
7.	employing Islamic fiqh in different life issues.	is	1	2	3	4	5
		Should	1	2	3	4	5
8.	courses about the nature of teaching Islamic education in schools.	is	1	2	3	4	5
		Should	1	2	3	4	5
9.	information about contemporary issues.	is	1	2	3	4	5
		Should	1	2	3	4	5
10.	encouragement of tolerance for other religions.	is	1	2	3	4	5
		Should	1	2	3	4	5
11.	providing for students' interests in studying different Islamic subjects.	is	1	2	3	4	5
		Should	1	2	3	4	5
12.	encouragement for students to study society's needs and problems.	is	1	2	3	4	5
		Should	1	2	3	4	5
13.	courses do not duplicate each other.	is	1	2	3	4	5
		Should	1	2	3	4	5

14.	information regarding the contents of courses is organized in sequence.	is	1 2 3 4 5
		Should	1 2 3 4 5
15.	information about other religions and ideologies.	is	1 2 3 4 5
		Should	1 2 3 4 5
16.	students are provided with different sources and references in Islamic education.	is	1 2 3 4 5
		should	1 2 3 4 5
17.	students are provided with the information related to the Hadith and its books.	is	1 2 3 4 5
		Should	1 2 3 4 5
18.	information about the social system in Islam.	is	1 2 3 4 5
		Should	1 2 3 4 5
19.	studying about how other cultures view Islam.	is	1 2 3 4 5
		Should	1 2 3 4 5
20.	studying about the leaders and scholars of Islam.	is	1 2 3 4 5
		Should	1 2 3 4 5

Part Two: Methods of Teaching : (which means the different teaching strategies and interaction styles employed by the faculty who are responsible for teaching prospective teachers, as well as the educational courses which are designed to prepare teachers of religion.)

To what extent is/should each of the following items be included in the program for preparing Islamic education teachers?

21.	how to organize cooperative learning activities.	is	1 2 3 4 5
		Should	1 2 3 4 5
22.	students participate in group discussion.	is	1 2 3 4 5
		Should	1 2 3 4 5
23.	appropriate use of educational films to train prospective teachers.	is	1 2 3 4 5
		Should	1 2 3 4 5
24.	how to prepare lesson plans.	Is	1 2 3 4 5
		should	1 2 3 4 5
25.	opportunities for prospective teachers to practice teaching in the classroom.	is	1 2 3 4 5
		Should	1 2 3 4 5
26.	courses in the methodology of teaching Islamic education.	is	1 2 3 4 5
		Should	1 2 3 4 5
27.	appropriate use of technology in teaching Islamic education such as educational television and computers.	is	1 2 3 4 5
		should	1 2 3 4 5

28.	assistance for students to improve their skills in problem-solving.	is	1 2 3 4 5
		Should	1 2 3 4 5
29.	focus on the self-learning approach.	is	1 2 3 4 5
		should	1 2 3 4 5
30.	use of the scientific investigation approach.	is	1 2 3 4 5
		Should	1 2 3 4 5
31.	increasing students' motivation for learning.	is	1 2 3 4 5
		Should	1 2 3 4 5
32.	instruction in different methods of evaluating students in the school.	is	1 2 3 4 5
		Should	1 2 3 4 5
33.	information about different learning theories.	is	1 2 3 4 5
		Should	1 2 3 4 5
34.	development of students' skills in preparing and designing different instructional aids in teaching Islamic education.	is	1 2 3 4 5
		should	1 2 3 4 5
35.	how to write appropriate behavioral objectives in teaching Islamic education	is	1 2 3 4 5
		should	1 2 3 4 5
36.	reinforcement of positive attitudes towards teaching Islamic education.	is	1 2 3 4 5
		Should	1 2 3 4 5
37.	how to consider individual differences among students in the classroom.	is	1 2 3 4 5
		should	1 2 3 4 5
38.	development of skills in asking different kinds of questions in the classroom.	is	1 2 3 4 5
		should	1 2 3 4 5
39.	employing different modern instructional approaches in teaching Islamic education.	is	1 2 3 4 5
		should	1 2 3 4 5
40.	use of different activities in teaching Islamic education.	is	1 2 3 4 5
		Should	1 2 3 4 5

ARE NIGERIAN TEACHERS READY FOR SCHOOL REFORM? AN EMPIRICAL INVESTIGATION

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INTRODUCTION

Teachers are at the centre of any educational system. They are perhaps the most influential group of professionals within the school system. The professional and attitudinal preparedness of teachers for school reforms should be a critical factor in the logistics of planning for educational re-structuring.

It makes little sense to introduce reforms into a school system manned by a tired, frustrated and lethargic teaching labour force. Educational innovations should be introduced within an enabling environment. Teachers must be contented with their jobs before they could be asked to take on additional responsibility. Perhaps, Nigerians efforts at educational reforms in post independence years failed to yield the desired result largely because Nigerian teachers are simply too frustrated to take any reforms seriously. Therefore, educational directives stipulating reforms are often politely received but tactically shelved by a largely indifferent and frustrated teaching force. Data about the morale of Nigerian teachers are not encouraging. For illustration, Otegbade (1993); Odebiyi (1970); Ogundele (1996), to mention a few, indicate that Nigerian teachers are not quite satisfied with their job. Though no Nigerian study seems to have investigated the receptiveness of Nigerian teachers, to educational innovations. This may be due to the common sense implication of not expecting a dissatisfied labour force to show any commitment for innovation. Jousha (1970), in his examination of workload of teachers and it's relations to job satisfaction submits that it is not advisable to ask dissatisfied staff to take up an additional responsibility. Describing the plight of the Nigerian teachers, Joshua (1970) submits that "the status of the teaching profession is low. Recruitment has been haphazard while training has been inadequate. The teachers often do not get adequate salary to keep him contented or to enable him to maintain a standard of life comparable to that of others having the same qualification". In essence, Nigerian teachers are not likely to take up additional responsibility inherent in educational reforms. Odebiyi (1970) in his research work on some aspects of teachers task and job satisfaction, reports that Nigerian teachers are generally ill- equipped and dissatisfied with their jobs. This is in line with other research studies on Nigerian teachers morale. All these data become a source of concern when considered with the crisis condition currently pervading Nigerian educational system. Public education in Nigeria is perhaps at a crossroads where these are two main options. The first is to find a way out of the current wave of crisis in the educational system. The second option seems to be to keep on watching and allow the system to sort itself out. This second option may lead to disaster for the educational system. The first options is the only reasonable options to consider. This option however, involves widespread innovations and educational restructuring. But the central question is, is the Nigerian teaching force emotionally prepared to pay the price of salvaging Nigerian educational system. This is why this study is interested in conducting an empirical investigation of teachers preparedness for school reforms. Since most educational systems all over the world are engaging in educational restructuring and reforms, Nigeria cannot afford to be an exception. Coombs (1968) is even advocating the institutionalization of innovation into the educational system. This according to him is the most viable strategy of responding to widespread crisis in the educational system. This implies that Nigerian educational policy makers should take improvement of teachers morale very seriously. For educational system to keep pace with the speed and tide of human civilization, teachers must be happy and contented with their job. Radical improvement of teacher's morale is perhaps the first step towards making the educational system receptive to change and innovations.

Research Questions

The following are the research questions that directed the focus of the study.

1. Are Nigerian secondary school teachers well-disposed towards school reform?
2. Are Nigerian secondary school teachers keenly interested in re-training and in service education?
3. Is there a significant relationship between teachers receptiveness to school reforms and their job satisfaction?
4. Do teachers receptiveness to schools reforms and their job satisfaction vary significantly across Urban and Rural areas?

METHODOLOGY

Subject

The study sample was drawn from twenty secondary schools in Osun state of the Federal Republic of Nigeria. Three hundred teachers were sampled an the study. The in schools covered are equally distributed in urban and rural centres. In fact ten schools-each were purposefully selected for the study. Twenty teachers were randomly selected in each of the ten urban secondary schools while ten teachers were on the other hand randomly sampled in each of the rural secondary school.

Altogether 300 teachers ultimately formed the sample of the study.

Instrument

Two different types of self-constructed questionnaires were used in the study. The first instrument is ten item-linkert scale specifically designed to collect information about the receptiveness of teachers to school reforms. The higher the *score of* each respondent the more pronounced is the receptiveness of such respondents to school reforms.

The second questionnaire is a ten item teachers job-satisfaction questionnaire. This questionnaire also has a five point linkers scale response format. The higher the score of linkert respondents on this scale the higher their job-satisfaction. The first and second instrument have **test-re-test** reliability coefficient of .076 and .085 respectively.

Procedure

The investigator personally administered the questionnaire, in all the secondary schools covered in the study. On reaching each school, the consent of the school principal was sought before commencement or questionnaire administration. Completed questionnaire were duly cross checked in each school visited. This is to ensure minimum or even zero attraction level. Data gathered were analyzed along the direction of the research questions earlier stated

Results

1. *Research Question 1: This question states: Are Nigerian secondary school teachers well disposed towards school Reforms?*

In order to provide answer to this question, the scores of the subjects of the study on the school Reforms, Receptiveness scale were sub-divided into four distinct divisions:

These are:

0-21	Not Receptive
22-24	Undecided
25-30	Receptive
31 40	Highly Receptive

The highest scorable total on this instrument is 40. The higher the score, the more receptive the respondent to school Reforms. The classifications adopted above is in agreement with categorization previous research studies such Owuamanam (1979) and Alao (1981).

The responses of the subjects of the study when subjected to the procedure of analysis indicated above yield the data in the (Table 1).

Table (1)
showing: Receptiveness of Nigerian Secondary School Teachers to School Reforms

Level of Receptiveness	Not Receptive	Undecided	Receptive	Highly Receptive	Total
No of Subject	9	6	166	119	300
Percentage	3%	2%	53.33%	39.67%	100%

As shown in table one only 9 subjects or 3% of subject population were not Receptive to school Reforms ,while 6 subject or 2% of study sample were undecided . 166 subjects or 53.33% were found to be receptive to school Reforms. 119 subjects were found to be very highly receptive to school Reforms. This represented 39.67% of the above subject sample.

2. *Research Question 2: This question states: Are Nigerian teachers keenly interested in retraining and in service Education.*

To answer this question, the responses of subjects to the items on retraining and in-service education on school reforms Receptiveness scale were collated for frequencies and percentages. Table 2 presents the data yielded in the analysis.

Table (2)
Showing Nigerian Teachers' Receptiveness to In-service Education.

Level of Receptiveness	Not Receptive	Undecided	Receptive	Highly Receptive	Total
No of Subject	12	4	180	104	300
Percentage	4%	1.33%	60%	34.67%	100%

As indicated in the table, only 12 subjects were not well disposed to in-service education while only 4 were undecided. 180 subjects or 60% of study sample were found receptive to in-service education while 104 subjects or 34.67% of the study sample were found to be highly well disposed to in-service education.

3. *Research Question 3 - states:*
Is there a significant relationship between teachers' receptiveness to school Reforms and their job satisfaction?

To answer this question, the scores of the subject on the school Reforms Receptiveness scale on one hand were correlated with the scores of the subjects on the job-satisfaction scale on the other. Pearson Product Moment Correlation Coefficient was adopted. Table 3 below presents the data yielded in the correlation analysis.

Table (3)
showing Correlation between Teachers' Job-satisfaction and their Receptiveness to school Reforms.

	$\sum X$	$\sum X^2$	N	$\overline{X}$	r
Reforms' Receptiveness	8992	276672	300	29.97	0.026
Job-satisfaction	2750	134314	300	9.167	

It should be seen that a correlation coefficient of r .026 was found between teachers' job satisfaction and their receptiveness to school Reforms. This correlation was not found to be statistically significant.

4. *Research Question 4: Do Teachers Receptiveness to school Reforms and their job-satisfaction vary significantly across Urban and Rural areas.*

To answer this question.
Two students T test analysis were carried out. The first was to find out whether teachers in rural and urban areas differ significantly in their receptiveness to school Reforms. The second found out whether this same set of teachers also differ significantly on their job-satisfaction scores.

Table 4a and 4b present the data generated from the analysis.

4a: T-test Analysis of School Reform Receptiveness of Teachers in Urban and Rural Area

Group	No	X	S.D	df	tc	Remark
Teachers in Urban Areas	200	37.575	26.69	99	.0364	Not Significant
Teachers in Rural Areas	100	36.67	16.18			

4b: T-test Analysis of Job-satisfaction of Teachers in Urban and Rural Setting

Group	No	X	S.D	df	tc	Remark
Teachers in Urban Areas	200	12.39	5.39	99	2.014	Not Significant
Teachers in Rural Areas	100	11.11	4.96			

DISCUSSIONS

It could be confirmed from the findings of this study that Nigerian teachers are ready for school Reforms. The responses of the 300 hundred Nigerian teachers sampled in this study confirm that the majority of them are receptive to school Reforms. More than 95% of the subjects' sampled were found to be receptive to school Reforms This finding perhaps indicates a deep-seated conviction in the minds of Nigerian teachers that management and running of Nigerian school need overhauling. It is there fore pleasing that teachers on the field are receptive for any forthcoming reforms.

The majority of Nigerian teachers sampled in the study were also very receptive to in-service education. In fact about 94% of the 300 teachers sampled found in-service education desirable. Regrettably. Nigerian teachers are not often provided with the opportunity of in-service education. This study did find a statistically significant correlation between teachers job-satisfaction and their receptiveness to school reforms. This finding may be due to the nature of the two constructs involved. Job-satisfaction is more real and immediate to teachers than receptiveness to reforms which is often anticipated and future oriented. It is not likely to find a significant correlation between two such variables.

This study did not find any significant difference in the receptiveness of Urban teachers to school reforms and those teachers from rural setting. This may be due to the fact that school Reforms should apply to all school no matter the setting. This is perhaps while both urban and rural teachers exhibit similar patters of receptiveness to school reforms. The findings on the job-satisfaction of teachers from urban and rural areas confirm that urban teachers are significantly more satisfied with their jobs than their counter-part in rural areas. In fact, the findings of this study on teachers' morale appear disturbing More than 40% of the subject sampled are not happy with their jobs. This is perhaps why teachers job-satisfaction will not correlate significantly with their receptiveness to school reforms. Teachers from rural settings appear to be a special group whose morale need urgent enhancement. It does not augur well for a country with vast rural population like Nigeria to harbour a largely dissatisfied teaching force in her school in the rural areas.

This study should however end with a note of warning The high receptiveness of Nigerian teachers to school reforms as reported in this study should not be interpreted

752

out of contest. Receptiveness to school Reform as conceived in this study is an anticipated or future oriented one. It is not a receptiveness to reforms already on ground. One needs to make this clarification, because the job-satisfaction of teachers sampled in the study does not indicate that such teachers will be enthusiastic about implementing any school reform. It perhaps does not make much sense to ask dis-satisfied teachers to introduce changes into the school.

It is therefore one thing to indicate that one is receptive to school reforms, it is quite a different thing to be willing to actually implement school reform. It appears Job morale, which is patently lacking amongst Nigerian teacher makes the difference Nigerian educational policy makers should therefore make urgent and more committed efforts to change the morale of Nigerian teachers. No country could move forward, with a largely dis-satisfied teaching manpower.

References

Alao, K.A. (1991). Demographic variables and vocational self concept as correlates of career decision-making, among students in some Nigerian University Doctoral thesis submitted to the Faculty of Education, Obafemi Awolowo University, Ile-Ife, Nigeria.

Coomb, P.H. (1968). The World Educational Crisis: A Systems Analysis, Oxford University Press, New York, U. S.A.

Joshua' O.B. (1970) . York Load of Teachers - its relation to job Satisfaction. B.A ED, professional seminar presented to Faculty of Education, University of Ife, Ile-Ife, Nigeria.

Odebiyi, S.O.A. (1975). A Study of Some Aspects of Teachers tasks and **job-satisfaction in primary** chool at Ibadan, Professional Seminar Printed to Faculty of Education, University of If e, I le-Ife, Nigeria. .

Ogundele, J.A. (1996). Job Satisfaction Among Secondary Schools Principals in Oyo State, Based on Frederick Herbeg Motivation Hygiene Theory. Journal of Education and Society . Vol. . 12, No 2,, pg. 28 - 39.

Otegbade, T.O. (1993). **Work Attitudes of Teachers in Selected Secondary Schools in Ife Central Local Government, Osun State,** Nigeria. B.A.ED. Research Essay Submitted to the Faculty of Education, C Obafemi Awolowo University Ile-Ife, Nigeria.

Owuamanam, D.O. (1979). Employment - Aspirations and Peer Group Influences As Correlates of Academic Motivation Among Adolescents- in Imo State Secondary School, An Unpublished Ph.D. Thesis, Faculty of **Education, University of Ife,** Ile-Ife, Nigeria.

FAFUNWA'S CONTRIBUTIONS TO TEACHER EDUCATION REFORMS IN NIGERIA

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INTRODUCTION

Our aim in this paper is to delineate the unique contributions Professor Aliu Babatunde Fafunwa has made to teacher education reforms in Nigeria. To achieve this, we will commence with his radical and innovative ideas on teacher education when he was the Dean of the Faculty of Education, University of Nigeria, Nsukka, 1961 - 1966. Then we will discuss his role in the preparation and formulation of the National Policy on Education. The paper will also examine his ideas of a competent teacher and the type of training programme suitable. Finally, we will discuss his Ife Six Year Primary Education Project.

1. University of Nigeria, Nsukka, 1961 -1966

Actually, before Professor Fafunwa took up teaching appointment at Nsukka, he had spent about a year at Ahmadiyya College as a senior tutor. One could categorically claim that it was here that he started to nurse the idea that teacher education in Nigeria needed reforms. While in the school, he spearheaded the formulation of a code of conduct for the teachers along with school rules and regulations for the pupils. At Ahmadiyya also, he realised that lack of competent teachers contributed immensely to the Nigerian educational system being too examination oriented. Although the step he took at that time to have a discussion with the Registrar of the West African Examination Council did not solve the problem, the Nigerian National Policy on education of which he was one of the leading architects has considerably de-emphasised the importance place on examinations.

At Nsukka, Fafunwa led the academic's members of the Faculty of Education to pioneer the training of a set of first degree holders in education thereby becoming the first Dean of Education in Nigeria and indeed in Africa to achieve such a success in the area of teacher education. Historically, the common practice before then was for teachers to receive a degree in another discpline other than education and later to be trained as a post-graduate student for nine months to be qualified to earn a diploma in education. Fafunwa considered this to be grossly inadequate.

Another remarkable contribution of Fafunwa at Nsukka to teacher education reform in Nigeria is the introduction and development of the Nigeria Certificate in Education teacher preparation programme. This programme later become so popular that its demands could not be handled by the Nigerian Universities. Thus there is hardly any state in Nigeria now which has not established a college of education to train teachers for the Nigeria Certificate in Education.

Now the Nigerian National Policy on Education has strongly recommended (Section 9, paragraph 61) that the holders of N.C.E. should form the core and be the minimum teaching qualification in Nigeria as from 1998. Hardly would anyone realise that this endeavour started as a university initiated course under the creative leadership and foresight planning of Professor Fafunwa.

It was also while at Nsukka that he initiated the long vacation education programme for primary school teachers. Although the programme has assumed different dimensions in recent years, the original aim remained - the improvement of the Nigerian teachers' teaching competencies.

Lastly at Nsukka though this point may not be regarded as a strong one for our thesis that he contributed to teacher education reforms in Nigeria, still it needs to be made. When he was compelled by circumstances, he experimented with the admission of Grade Two Teachers for the degree programme in education when such entry qualification would be considered too low for admission to degree courses under the British Colonial system. The experiment worked. Thus it was realised that some qualified grade two teachers could be attractive materials for degree training in education.

Fafunwa, being a pioneering educator in Nigeria, has a strong flair for creativity, innovations and experimentation. He does not believe in failure. He always says, let's try and see. In addition, he always relies on the workability and social need of his innovation, as evident from the reforms cited above.

It should be pointed out, however, that he often met with some opposition, for example, his degree programme was met with skepticism at the University of Ibadan, however, it was later realised that the experiment was a landmark in the history of teacher education reforms in Nigeria. But he was convinced that such a reformation was necessary in an independent Nigeria. Today, it seems evident that the best crop of teachers in Nigeria are the products of Fafunwa's Nsukka experiment.

2. Preparation and Formulation of the Nigerian National Policy on Education

In the September 1966 issue of Educational Innovation and Information dedicated to the role of teachers, the Director of International Bureau of Education, Juan Carlos Tedesco observed thus: "the experience of recent decades has confirmed that it is not possible to continue reforming education systems without taking the teachers into consideration; but, on the contrary, it was also confirmed that we cannot ask teachers to change without education itself changing. The success of educational policies depends to a great extent on the integrated nature of their training; With that brief introduction to this section of the paper, we believe that Professor Fafunwa deliberately proposed to the Nigerian Joint Consultative Committee on Education at Enugu, Nigeria, in 1964 thus "be it resolved that the JCC under the leadership of the Federal Ministry of Education convene a two week conference of a cross-section of the Nigerian public to review the present system of education in Nigeria to determine the end to which education should serve in an independent Nigeria".

Characteristic of his innovations, this proposal was violently objected to by some members of the committee at the initial stage. When it was eventually approved, the summer of 1966 was fixed for the conference. But due to the civil war that broke out during the summer of that year, the conference was postponed indefinitely.

In his paper when the conference was finally convened September 8 - 12, 1969 titled "The Purpose of Teacher Education" Prof. Fafunwa suggested far-reaching ideas for teacher education reforms in Nigeria.

Some of his recommendations include:

1) Raise the pre-requisite for the entry to teachers colleges to a full secondary education.

2) Raise the status of the teacher and reclassify teacher as (a) Professional (b) Intermediate and (c) Auxiliary.

3) Encourage teachers association to establish an appropriate code of ethics as well as an effective disciplinary system in order to become professional both in theory and in practice.

4) Governments and ministries should consult teachers more frequently and effectively before new policies affecting teachers in particular and education in general are promulgated.

5) Pay a higher salary to teachers who work in the rural areas; at least a twenty-five to forty per cent increase in their salary will offer the necessary incentive.

6) Centralise teachers' college in a few areas and reduce the present 179 teacher training colleges to about thirty or less for the whole country.Each college will have an intake of 500 to 5,000 and will be comprehensive in that it will offer courses for *pre* school, nursery, primary and secondary courses as well as technical, commercial, home economics and agricultural teacher education. All successful candidates will offer a three year course, receive the same type of certificate and all certificates will have parity of esteem as well as attract the same salary. Able students from the teachers' college may proceed to complete a two-year degree course in their area of specialization.

7) University Institute of Education should assume full responsibility for the education of the teachers of teachers and provide diploma courses for new university lecturers.

8) The holders of B.A/B.Sc. (Education), B.Ed. and the N.C.E. or its equivalent should be recognised for incremental and promotional purposes.

Section 9 of Federal Republic of Nigeria's National Policy on education (Revised 1981) devoted to Teacher Education has twenty-six articles. There is not one of these that Professor Fafunwa has not suggested as far back as 1967. All these and others not included are documented in his book New Perspectives in African Education. No wonder then that Aladejana and Alao stated in Aliu Babatunde Fafunwa: His Educational Philosophy and Contributions to Nigerian Education (1993) thus: "As the Federal Minister of Education, Fafunwa was charged with the important responsibility of evaluating, protecting, defending, preserving, interpreting and implementing the National Policy on education.

3. Competent Teacher

Professor Fafunwa believes that a good teacher should be trained to be competent. According to him (1967) a competent teacher must have the necessary ability, authority, skill and knowledge to enable him perform his duties in and outside the classroom. He contends thus "at a less formal level the competent teacher is a good citizen, a community leader, an innovator or an enlightened parent "(P.83). Not only that, he believes that one of the most enduring ways to be a competent teacher is to be able to relate and identify with the people. According to him: The teacher should be so educated that his duty should extend beyond the classroom. Sympathetic understanding of the people and their problems and full identification with the people among whom the teacher works are two of them most essential factors that will contribute to the people's acceptance of the teachers leadership (PP 93 and 95).

He believes (1967) that the course of events must be changed by teachers "in the new world a coming" (Pg iii). To facilitate this change, competent teachers must be at the vanguard of educational reforms. For this to happen, the teachers must be trained and educated most competently.

Therefore he believes that teacher education must be related to every phase of development ... but no adequate training can take place without competent teachers to handle the programmes" (1967, p.82) A teacher becomes competent through training, education and dedication.

For him, teaching is a monumental task, which affords one the ask opportunity to think, ask questions and participate by disagreeing with the teacher in order to foster better understanding for living. His challenge to teachers to be flexible rests on these phrases "to enter into the spirit of the new African age", "Willingness to share new information and skills", "Readiness to seek more knowledge", "being willing to experiment" and "not to be afraid of failure". All these call for flexible reforms on the part of the teacher. According to him flexibility is built into the teachers education programmes and training as a professional teacher.

Fafunwa has also made tremendous contributions towards teacher education reforms in his suggested programmes. He has consistently argued that in order for a teacher to possess the qualities of a competent and flexible teacher, he must have gone through the required training, education and experience. Thus "it is mandatory that we educate our teachers, under one roof" (Fafunwa 1969, P.90). This means that all teachers education programmes from the kindergarten to the secondary should take place in one type of institution. He argues that this will foster "a sense of belonging to the same profession".

He presents three essential areas of teacher education in his programme.

(a) General education:

All candidates wishing to join the teaching profession must learn the following;

(i) Social sciences for the understanding of the social and economic forces within the society.
(ii) Natural sciences for sciences for scientific knowledge and some understanding of natural things around, below and above him.
(iii) Humanities which the teacher needs to broaden his knowledge and understanding of the local, national and contemporary world literature.

(b) The second aspect of his programme is subject matter or specialized education. This refers to such specific subjects as history, geography, physics, chemistry, mathematics, music, fine art, etc. Or as he simply terms it "vigorous standard"

(c) The third of his programme is professional training Fafunwa believes that a prospective professional teacher must undergo at least three years of intensive training during which time he must undergo the necessary and required training to complete such foundations of education courses as, philosophical, historical, and sociological. There are others like comparative education, method courses, teaching practice and teaching intrenship. In 1991, while still the Nigerian Federal Minister of Education and Youths Development, he persuaded the members of the National

Council on Education to make 1995 the deadline for all untrained and/or uncertificated teachers should be employed by the states or any of the local governments .

Also, under his leadership, the National Council on Education proposed to the Federal Government that by 1988/1999 academic session, all teachers in the primary schools should be holders of the Nigeria Certificate of Education. In addition, only graduates in education or those with accredited postgraduate diploma in education will be employed to teach at the secondary and tertiary levels. If these proposals are adhered to, from October 1998, there will be only two categories of teachers in the Nigerian educational system, certificated and uncertificated. Only certificated and Nigeria Certificate of Education holders will be adjudged to be professionally qualified and registered as such to teach in the school system. All others will be auxiliary teachers until they are fully certified within a specified time after which they will not be permitted to teach in any of the educational institutions. To Fafunwa, it was a dream come true after twenty-two years of concerted effort in this direction. To top it all, he caused a decree to be drafted setting up the much awaited Teachers Registration Council before the end of his tenure as the Honourable Minister of Education and Youth Development.

At the National Curriculum Conference 8 - 12 September 1969, Fafunwa concluded his paper on "The Purpose of Teacher Education thus: In conclusion, may I reiterate that teacher education is initimately related to the ever recurring problem of the need for trained manpower in Nigeria and therefore affects the social, political and economic spheres of our lives. Teaching, more than any other profession touches the life of practically every citizen either as students, parents, guardians or administrators and planners. To treat the teaching profession with levity and careless abandon is to damn our own future. A poorly trained and unsure teacher will likely produce a poor doctor, engineer, architect, fellow teacher and the like. The services of the teacher are indispensable to a nation, for they, more than any other professional group, influence the lives of the Nigerian youth and therefore the nation's future 4 (pp. 96 -97).

Teaching In the Mother Tongue

It remains one point to be mentioned in the pedagogical reform efforts of Professor Fafunwa-instructing primary school pupils in their mother tongue.

There are two historical perspectives to this aspect of Fafunwa's reform efforts. One was told by Professor Babatunde Ipaye during the First Foundation Annual Lecture of Fafunwa Educational Foundation titled" The Fafunwa Phenomenon in Nigerian Education", held on September 23, 1996. Ipaye discussed at length how "the colonial government did not interfere with the use and teaching of the mother tongues in mission schools between 1842 and 1881; However with the beginning of government participation in and control of education, the indigenous languages began to suffer some set back". Thus, clause 10 section 5 of the 1882 Education Ordinance specifically provided that grants would only be paid for the teaching and learning of English Language and not for the teaching and learning of vernaculars "(Ipaye, 1966, page 20).

Professor Fafunwa is one of those who struggled against the colonial recalcitranne to instruct Nigerian children in their mother tongue.

The second historical background relates to Fafunwa and his relations who worked at the Nigerian Railways According to him, many of his relations including his father worked with the Raillways, some as illiterate technicians, many of whom developed the habit of "Yorubanising" the technical terms. Thus, there were such "Yorubanised" words as "Kopulu" for couple, "boila" for boiler, "wosa" for washer, "wagonu" for wargon and "braketi" for bracket, (Fafunwa, Up and on 1996 p. 20).

The Ife Six Year Primary Project

It is the Ife Six Year Primary Project that Fafunwa used to hypothise and prove his thesis that teaching a child in his mother tongue at the primary level will help that child to learn, understand and achieve better than teaching him/her in a foreign language like the English Language. The project was generally seen as one of his original and radical contributions to the reformation of teaching and learning in Nigeria as a strategy for development. Thus Aladejana and Alao reasoned that the importance placed on primary education in the National Policy on Education convinced him that if the necessary and sufficient researches were conducted in the area of primary education in the mother tongue Nigeria would be or would have been in a better position to boast that educational policy is in the point of vantage to contribute to national development.

Seven objectives were initially designed for the project, namely, to:

(a) "adopt a primary one class of thirty to forty Yoruba children in a given primary school in Ile-Ife, Nigeria;

(b) teach them in Yoruba as a medium of instruction throughout primary school;

(c) teach English to **them as a second language from the first** day of school and throughout the course;

(d) arrange with a secondary school in Ile-Ife to admit all the children after primary education;

(e) give an intensive course in English during the first year in the secondary school;

(f) let the children complete the rest of secondary school normally;

(g) compare the experimental children with others primarily in terms of academic achievement, and secondarily in terms of social adjustment, enterprise and resourcefulness" (Aladejana and Alao, 1993, p. 53.

Fafunwa believes that instructing in the mother tongue will contribute to academic achievement, resourcefulness and development. Thus, according to him. We are also aware that our state of underdevelopment has remained for so long largely to our use of English and French. We import knowledge and skill almost exclusively in these foreign languages while the majority of our people, formers and craftren perform their daily tasks in Yoruba, Hausa, Igbo, Nupe, Ijaw etc. Fafunwa, 1989, p, vii).

CONCLUSION

The project recorded such successes in terms of the awareness that there are "immense possibilities for the use of any African language" - for example one hundred and forty-six textbooks were produced in the five curricula areas identified in the project (Science, Mathematics, Social and Cultural Studies, Yoruba Language and English) In addition, according to Fafunwa. One major thing that the Ife Project has achieved is that apart from the fact that quite a sizeable percentage of the foundation students had successfully gone through both secondary school and tertiary programmes, they had done so with greater ease than their counterparts from the regular or contral schools; and had proved better integrated individuals, well-adjusted, more resourceful and decidedly self-reliant, Fafunwa, 1989, P. 138.

References

Adaralegbe, A, (Editor) (1969) **A Philosophy for Nigerian Education.** Ibadan: Heienemann Educational Books (Nig. Ltd.), pp. 95 -- 96

Aladejana, Tony I & Alao, Kayode, (1993). Aliu Babatunde Fafunwa: His Educational Philosophy and Contributions to Nigerian Education, Lagos : Academy Press, P.80

Professor Fafunwa, in an interview agreed that this 1967 work could be regarded as one of his best literary contributions to African and indeed Nigerian educational reform. The book has been reprinted more than four times.

Adaralegbe, A. (Editor) 1969 pp. 96 - 97.

A STUDY OF INDUCTION YEAR PROGRAM FOR BEGINNING TEACHERS IN JORDAN

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INTRODUCTION

Upon the recommendations of Jordan National Conference for Educational Development, it was resolved that as from 1991-1992 admission to the profession will be confined to qualified teachers who hold a university degree and pass a probationary year, adding, "candidates who prove to be unsuitable for the profession will be weeded out". The purpose of this study was to investigate the conditions under which probationers serve in the schools of Jordan. The study applied a questionnaire, drawing a ten percent systematic sample of all teachers attending the 1995-1996 induction program, all school heads and supervisors in three Governorates of Education in Amman the-capital, about 60% of the subjects of the study provided usable data. Among major findings :

1. Written material is available for organization and administration of induction courses in Jordan.

2. Beginner teachers are assigned and held responsible for the same assignments and responsibilities as veteran teachers. No distinction between entry-level proficiency and mastery-level proficiency is observable in evaluating new teachers.

3. New teachers indicated that they do not keep in touch with their sources of supply: the universities or colleges of educ, simply becaue they are overloaded with teaching responsibilites.

4. School heads as well as educational supervisors are over burdened with clerical work, to support supervisory staff perform an outstanding job, it is recommended that master teachers are assigned in every school or a group of neighboring schools to help new teachers pass the bridging period between initial and in-service training.

5. The contribution of higher education has yet to be explored... It is recommended that universities orient their graduates and condition them to a self-felt obligation to get involved in further professional courses. It is also recommended that colleges of education keep track of their graduates for both guidance and feedback. This collaboration and communication between all probationary organizers help to formulate precise aims and to develop a body of knowledge for their induction courses.

1. BACKGROUND OF THE STUDY

Jordan holds firm belief in education as a potent force with immense possibilities for the development of social and economic standards. It is equally believed that the teacher is the corner-stone in the educational edifice and any reform in education should begin and end with the teacher whose knowledge, skills and attitudes determine the quality of education and the quality of education determines the future of the country.

That's most probably why the knotty problem of obtaining good teachers has long been a dear goal for Jordanian Educational Authorities and in an attempt to reach that ambitious goal, teacher training institutes were established as early as 1950's; admission to those institutes was open for students holding the "General Secondary School Certificate Examination "GSSCE". One year of professional training was offered to those student teachers and on graduation they were appointed to serve in elementary or middle schools. In the early 1970's a two- year teacher training program came up under the umbrella of Community Colleges which unprecedently spread swiftly all- over the country. The expansion of this type of intermediate colleges was so dramatic that in 1984-1985 there were just 21 colleges accommodating 11196 students & just within five years later the enrollment escaladed higher to reach 22645 students enrolled in over 50 community colleges.

The accelerating change in all aspects of life in Jordan, situated in the great land bridge between Europe, Africa and Asia, called for a comprehensive appraisal of teacher education so as to respond adequately and interact effectively to the emergent New Role of the teacher. In 1987 and upon the recommendations of the National Conference for Educational Development,(1) it was resolved the candidates for entry to the teaching profession be required to have completed first university degree requirements (Professional & academic studies for a minimum of 4 years), with the stipulation that permanent **Teaching Licence** would be granted to university graduates and to those who would pass a **Probationary year** during which incompetent new teachers should be weeded out & the competent ones would be retained with all possible means of incentives & rewards.

This recommendation has been in effect since the academic year of 1991-92. The purpose of this paper then is to investigate one aspect of this recommendation, namely, the nature, extent and adequacy of the induction year program offered to probationers in Jordan . It is worth mentioning that a Guide for Training New Teachers, published in June 1995, came to state that the objectives of the induction year program as to acquaint New teachers with the essential requirements of the teaching job as well as with the rights and duties of teachers joining the ranks. It was added : since New Teachers did not practise teaching long enough during their pre-service education, they often draw upon personal impressions & resort to hap-hazard experimentation and this quite often ends with teaching pitfalls & blunders which leave harmful impact upon both the teacher & the student. Therefore, the Guide continues, this induction year program has been designed to assist teachers perform their duties effectively. The above mentioned Guide embodies three sections : ONE refers to the objectives, the rationale & the know -how to implement the program. TWO acquaints new teachers with their duties & rights, the code of teaching ethics, the generic competencies of teaching such as ; lesson-notes, class-discipline, teacher- made tests ..etc.. section THREE focuses upon school curricula, textbooks with reference to methods of teaching special subjects.(2)

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(1) Jordan Ministry of Education (J.M.E). Plan for the Implementation of the Recommendations of the National Conference on Professionalization of Teaching. mimeographed in Arabic, 26th Nov. , 1987.

(2) J.M.E. Educational Training Center: Guide for the Training of New Teachers. June, 1995.

2. Methodology

2.1. **THE PURPOSE** of this study was to investigate:

2.1.1. The background and characteristics of people heavily involved in induction of new teachers. (professional) supervisors, heads, New teachers).

2.1.2. The importance and necessity of inducting new teachers (rationale for that).

2.1.3. The objectives of induction .

2.1.4. The amount and nature of guidance available to new teachers throughout the first year of service (during pre-teaching, during actual classroom teaching, and post teaching)

2.1.5. The teaching experiences of new teachers throughout the first year, (teaching load, inter-class visits, equipment, teaching problems, sources of assistance / guidance at school).

2.1.6. Personal problems encountered by new teachers (financial, traveling, accommodation ...etc.).

2.1.7. Benefits gained from induction courses .

2.1.8 Suggestions for the development of future induction programs.

2.2. The Population and Sample of the study

The population of the study consisted of all school teachers appointed in 1995-96, school heads, educational (supervisors on service during the scholastic year 1996-97 in the General Education Governorate :

Amman 1st - the Capital
Amman 3rd - the suburbs
Amman 4th - the Private sector

A systematic sample of a 10% was randomly selected from the official records of employees kept at the M.E. Information center. The sample make up was as shown in table 1:

Table (1)
Subjects of the Study
New Teachers (1995-96) + Edal. supervisors + School Heads in The General Governorate of Educ. for the Capital

	Amman 1st		Amman 3 rd		The Private Sector		No. of subjects of the study
	No.	10%	No.	10%	No.	10%	
New teachers Attending Induction in 1995-96	161	16	178	18	240	24	579 58
Educational Supervisors	42	04	20	02	26	03	88 09
School Heads	274	27	191	19	290	29	755 75
Total	477		389		556		1422
10 %		47		39		56	142

2.3. The Instrument:, having identified, the eight areas under discussion in this study, the investigator reviewed available professional literature both in Arabic and English besides conducting preliminary interviews with people in key-positions in the M.E. and out of that 112 items thought to be directly related to the above mentioned eight areas .

These items formed the draft of a questionnaire which was later submitted to a group of judges composed of people representing different segments of the teaching profession in Jordan .

The judges were asked to assess each item in terms of relevancy & importance as well as to the topic of this paper & to the purpose of the study. Twenty items were discarded and only 92 were retained to form the items of two separate questionnaires. One for the professional leaders (77 items) & the other for teachers with 58 items. It is worth noticing that 41 items were identical in both questionnaires.

2.4. **Prior to the distribution of the questionnaire, a Pilot** study was conducted in an attempt to assure the adequacy and clarity of the instrument.

In the light of the responses, ambiguous, and unfamiliar terms were rephrased in a more comprehensible language, open - ended questions were added to both instruments, sensitive questions about marital status (divorced , separated, engaged ..etc.). were confined to single or married; also age, instead of being specific was shortened to 25+ to 25- . Two percent of the population of the study were included in the pilot study and this group was excluded later.

2.5. The Validity and reliability of the Instrument:

2.5.1. Each item included in the questionnaire was closely related to the topic under investigation . Irrelevancies, repetitions and ambiguities were removed during the pilot study and upon the recommendations of the group of judes who indicated a number of irrelevant and insignificant items and in the meanwhile suggested some appropriate items that were not formerly touched upon in the draft questionnaire.

2.5.2. To enlist the cooperation of the participants , the purpose of the study was clearly explained in the covering letter; filling in the questionnaire was left for the free decision of the participants with an assurance of anonymity . An official permit issued by the Deputy Undersecretary of the Ministry of Education for conducting the study was annexed with the questionnaire and both were delivered by the General Governorate of Education for the Capital with a request to return filled in questionnaires to the same office within a fortnight and via the Ministry of education Mail.

The **Reliability** of the questionnaire was checked through a process of scrutinizing the internal consistency of the respondents' responses. Out of 128 questionnaires returned only 83 were used and the rest were discarded for lack of consistency and accuracy. (see table 2).

2.6. Analysis and Treatment of Data

According to a 5- point rating scale each item in the questionnaire was rated by people heavily involved in induction programs: educational supervisors, school heads, new teachers.

The total weight of value points received by each item by each separate group of the above three was summed up as follows:

Total weight of an item = n_1 x 4 + n_2 x 3 + n_3 x 2 + n_4 x 1 + n_5 x 0
where n_1 = number of respondents giving an item a weight of 4.
n_2 = number of respondents giving an item a weight of 3.
n_3 = number of respondents giving an item a weight of 2.
n_4 = number of respondents giving an item a weight of 1.
n_5 = number of respondents giving an item a weight of zero.

Through this procedure the total weight given to each item by each of the three groups of participants in the study was calculated.

Then the over-all weighted mean of rating for each item was calculated to present the rating of each item by the subjects of the study as a whole.

The steps followed in finding out the over-all weighted mean of rating were as shown here below:

$$\frac{W1 + W2 + W2}{N1 + N2 + N3}$$

Where (W1) = total of points given by teachers or group (1) .
W2= total of points given by school heads (group II).
W3= total of points given by educational supervisors (group III).
n1= number of respondents in group I.
n2= number of respondents in group II.
n3= number of respondents in group III.

Through this process of calculations the over-all weighted mean of rating was found out for each item and presented on a four point scale as well as in percentages.

A Summary of the results reflecting the ratings of the eight major aspects of teacher induction in Jordan is presented in tables showing the items arranged in rank order.

Then results were categorized into five classes on the basis of the points given to each item by the professional practitioners as illustrated below:

(i) items with high applicability (strongly agreed to) have received (3.20- 3.99) points = (80-99.9%).
(ii) items with satisfactory applicability (agreed to) have received (2.40-3.19) points = (60-79.9%).
(iii) items with fair applicability have received (1.60-2.39) points = (40-59.9%).
(iv) items with poor applicability have received (0.80-1.59) points = (20-39.9%).
(v) items with negligible applicability have received 0.79-points = 19.9%.

A line of demarcation is hypothetically drawn between items having a weight of 60% and above and those falling below 40%. it is arbitrarily considered that all items receiving an over all point below 40% as critical areas calling for special attention.

2.7. Collecting Data

The questionnaires were handed to the Director of Educational Affairs in the Governorate of the Capital, Mr. Husni Sharif Al-Qasim. Every Educational Directorate having its share in a self-addressed envelope. The Undersecretary of the M.E. circular calling for cooperation & offering every possible assistance to the researcher was enclosed with each questionnaire. Envelopes were carried through the M.E. mail with instructions to be filled in and returned via the same route-the M.E. mail.

The investigator kept in touch with educational supervisors until the returns seemed satisfying as it is evident from figures in Table 2.

Table (2)
Questionnaires sent, returned, removed and with usable data

	Participants	**No. of Questionnaires Sent**	**No. of Questionnaires Returned**	**No. of Questionnaires Removed**	**No. of Questionnaires with Usable Data**
Amman 1st	Teachers (Ts.)	16	16	04	12
	Heads (Hs.)	27	27	14	12
	Edu. Supervisors. (E.S.)	4	4	00	04
Amman 3rd.	Ts.	18	18	03	15
	Hs	19	17	07	10
	E.S.	2	2	00	02
Private	Ts.	24	20	10	10
	Hs	29	22	7	15
	E.S.	3	3	00	03
Total		**142**	**128**	**45**	**83**
%		**100**	90	**31.5**	**58.5**

The above figures show that the return was 90% but the percentage of questionnaires with usable data was just 58.5%. This indicates that 31.5% of the returns were removed for lack of internal consistency or for incompletion of all items.

The over all no. of ts. with usable data	37	
The over all no. of Hs. with usable data	37	
The over all no. of Ed.Sup. with usable data	09	
	83	= 58.5%

2.8. Limitations of the study

2.8.1. Pre-school, Vocational and UNRWA's schools were all excluded on the ground that the curricula of these schools are heterogeneous and induction of school teachers vary accordingly.

2.8.2. Only teachers who attended induction courses during the scholastic year of 1995-96 were included that's simply because that was the first time when a specific and written program for new teachers was implemented.

2.8.3. The questionnaires suffered from two drawbacks: the non-respondents tended to lower the validity of the findings and the lack of sufficient evidence to check the reliability.

2.8.4. The criteria selected for determining the adequacy of current induction program in Jordan will be derived from a study of successful experiences in some advanced countries but since no standardized norms are yet universally accepted therefore the conclusions of this study are Tentative.

3. Findings

Survey results are presented here under headings corresponding to the eight areas investigated by the questionnaires :

3.1. Demographics make-up of respondents :

Table (3)
Respondents' Gender, Age, Marital Status and Positions

Gender		Age		Marital Status			Position		
F.	M.	-25	+25	Single	Marr.	Others	Teachers Ts.	Heads H.	Educ. Supervisors
49%	51%	7%	93%	4%	94%	2%	44.5	44.5	11%

It is worth noticing that the over-all percentage of the female Ts are almost equivalent to the male ts. The education of the woman in Jordan moves at the same pace with the man. No discrimination is exercised against the educ. of the girl. The equal nos. of Ts. & heads may be construed as the original nos. of Ts. & heads are equal that is not true & impossible & the explanation is this: only Ts undergoing induction training during the year 1995-96 were included not all the 10% of the population. As to the educational make-up of the subjects of study, table (4). reflects that.

Table (4)
Educational Make up of respondents

	Under GSSCE	GSSCE	Dip-loma (2 years)	B.Sc B.A	Diploma Post B.A Or Bsc	M.A	Ph.D.
Ts.	0.4	0.77	30	29	0.1	0.00	0.000
Hs.	0	0	04	21	1.1	0.30	0.000
Edal Supr	0	0	0	2	2.4	8.43	0.006
%	0.4	0.77	34	52	3.6	8.73	0.006

Table (4) indicates that more than 50% of the sample are university graduates & about 12% hold post graduate degrees. Seven out of nine edal. Supervisors hold M.A's - Most of heads & edal supervisors' degrees were in administration / supervision.

Concerted efforts are being exerted to upgrade substandard teachers those below university degree level.

3.2 Importance and Necessity of Induction Programs for New Teachers

Table (5) shows the responses' elicited from Respondents

Table (5)

Respondents Views of the Importance and Necessity of Induction Programs for New Teachers in Jordan Arranged in total points (f), weighted Mean & Rank order

Q.2. Question statement*: To what extent do you agree or disagree that an Induction program is both important and necessary? Check one of these possibilities:

Item No	Question Items	Respond.	Points	Total Weight	Weighted mean**	%	Rank order
1.	Teaching practice at University college of educ. Is rather short.	Teachers Heads Supervisors	- 74 12	86	$\frac{86}{46}$	1.90	9
2.	Pre-service teacher - education quite often concentrates on theoretical studies.	Ts. Hs. Suprs.	- 111 36	147	$\frac{147}{46}$	3.2	4
3.	Teacher - education is a continuous process and should not end with graduation.	Ts. Hs. Suprs.	- 132 36	168	$\frac{168}{46}$	3.6	2
4.	The first years of service in teaching are formative for new Teachers.	Ts. Hs. Suprs.	- 113 23	136	$\frac{136}{46}$	2.95	6
5.	Procedures followed in the appointment of new teachers are lengthy & New Ts. pre-service training becomes obsolete.	Ts. Hs. Suprs.	- 143 34	177	$\frac{177}{46}$	3.84	1
6.	The rapid transition from a student teacher to a fully - fledged teacher with full duties & responsibilities.	Ts. Hs. Suprs.	- 127 29	156	$\frac{156}{46}$	3.39	3
7.	Mistakes committed by new teachers (N.Ts.) are rarely discovered in opportune time & may leave eraseable harm later.	Ts. Hs. Suprs	- 109 7	116	$\frac{116}{46}$	2.52	5
8.	Absence of a teacher - tutor or a mentor to assist new teachers.	Ts. Hs. Suprs.	- 74 18	92	$\frac{92}{46}$	2.00	8
9.	The need to assess the suitability of a new teacher and grant him tenure.	Ts. Hs. Suprs.	- 29 9	38	$\frac{38}{46}$	0.82	10
10.	The need to assist a new teacher pass the probationary year without stress and daunt.	Ts. Hs. Suprs.	- 104 32	136	$\frac{136}{46}$	2.95	6

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[*] This question is confined heads & education supervisors only.

[**] Weighted mean on a 4 point scale = $\frac{W_1 + W_2 + W_3 \ldots}{N_1 + N_2 + N_3 \ldots}$

3.3. The Objectives sought by Induction Program were collected from respondents as it is seen here below in table (6)

Table (6)

Respondents' views of the Objectives of Induction Program for New Teachers arranged in total points (f) weighted mean and rank order.

Q.3. To what extent do you agree or disagree the following statements composed the objectives of the Induction Program for New Ts.

Item No.	Questionnair's Items	Respond-ents	No. of Points f1=W1	Total Weight W1+W2 + W3	Weighted Mean *	%	Rank order
1	Defining the philosophy of Education in Jordan	school Heads Edal Suprs.	74 27	101	$\frac{101}{46}$	2.19	5
2	Acquaintance with ethics of the teaching profession	Hs Suprs.	143 36	179	$\frac{179}{46}$	3.89	1
3	Acquaintance with basic teaching skills **	Heads Suprs.	140 36	176	$\frac{176}{46}$	3.82	2
4	Planting positive attitudes towards the profession	Heads Suprs.	102 32	134	$\frac{134}{46}$	2.91	3
5	To assist New Teacher surmount the effect of rapid transition from a student to a teacher.	Heads Suprs.	69 18	87	$\frac{87}{46}$	1.89	6
6	To assess the suitability of a New Teacher for the task of teaching	Heads Suprs.	97 22	119	$\frac{119}{46}$	2.58	4
7	To allow a New Teacher a permanent job in the Public Civil Service.	Heads Suprs.	56 19	75	$\frac{75}{46}$	1.63	7

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* Weighted mean on a 4. point scale.

** basic teaching skills are the abilities which every teacher needs a.g. lesson planning, class discipline, testing, using teaching aids...etc.

3.4. The amount and nature of guidance obtained by New Teachers are shown in table 7 and the subsequent tables 8 & 9.

Table (7)

Respondents' Views of Guidance offered to New Teachers during the pre-teaching period Arranged in total points, weighted mean and rank order

Q.4 Question statement

What is the nature of guidance a New teacher obtains during the pre teaching stage? Agree or disagree with these possible answers:

Item No.	Question Items	Respond-ents	Points	Total weight	Weighted Mean	%	Rank Order
1.	Acquaintance with the philosophy of the Educational System in Jordan.	Teachers Heads Supervisors	48 60 24	132	$\frac{132}{83}$	1.59	6
2.	Introduction to the structure and administration of the educational system in Jordan	Ts. Hs. Suprs.	48 60 16	124	$\frac{124}{83}$	1.49	8
3.	Introduction to current educational tendencies in Jordan (Overrall Plan for educational Development).	Ts. Hs. Suprs.	51 124 9	184	$\frac{184}{83}$	2.21	4
4.	Orientation to the ethics of the teaching profession	Ts. Hs. Suprs.	60 122 21	203	$\frac{203}{83}$	2.44	2
5.	Acquaintance with the Gemeral Aims of Education in Jordan.	Ts. Hs. Suprs.	48 74 9	131	$\frac{131}{83}$	1.57	7
6.	Acquaintance with instructional objectives of teaching subjects to be taught by New Teacher	Ts. Hs. Suprs.	36 75 24	135	$\frac{135}{83}$	1.62	5

Cont. Table (7)

7.	Preparation of lesson-plans	Ts. Hs. Suprs.	111 110 27	248	$\frac{248}{83}$	2.98	1
8.	Observation of live demonstration lessons presented by Edal. Supervisors.	Ts. Hs. Suprs.	24 47 6	77	$\frac{77}{83}$	0.92	10
9.	Demonstration lessons presented by supervisors focus upon effective interaction of the learner with the teaching - learning process	Ts. Hs. Suprs.	36 49 30	115	$\frac{115}{83}$	1.38	9
10.	Definition of the qualities of a good teacher	Ts. Hs. Suprs.	88 74 33	195	$\frac{195}{83}$	234	3

Table (8)

3.4.1 Respondents' Views of Guidance offered to New Teachers during the actual teaching stage Arranged in total points, weighted mean and rank order

3.4.2

Question Statement :
What is the nature of guidance available to New Ts. during the actual teaching stage? Agree or Disagree with these possible answers:

Item No		Respon-dents	Points	Total Weight	Weigh-ted Mean	%	Rank order
1	Arrangements for inter-class visits with old-handed competent teachers.	Teachers Heads Suprs.	88 148 24	260	$\frac{260}{83}$	3.13	5
2.	Analyzing a class teaching visit	Ts. Hs. Suprs.	99 123 21	243	$\frac{243}{83}$	2.92	7
3.	Participating in extra - curricula activities	Ts. Hs. Suprs	148 110 24	282	$\frac{282}{83}$	3.40	2
4.	Participating in school staff meetings.	Ts. Hs. Suprs.	135 135 27	297	$\frac{297}{83}$	3.57	1
5.	Preparation of teacher - made tests.	Ts. Hs. Suprs.	98 135 24	257	$\frac{257}{83}$	3.09	6
6.	Analyzing results of tests and presenting feed-back to students.	Ts. Hs. Suprs.	124 136 18	278	$\frac{278}{83}$	3.34	3
7.	Discussing the criteria of a good class teaching lesson.	Ts. Hs. Suprs.	128 111 24	263	$\frac{263}{83}$	3.16	4
8.	Acquaintance with principles & means for self - evaluation.	Ts. Hs. Suprs.	98 98 18	214	$\frac{214}{83}$	2.57	8

Table (9)

3.4.2 Respondents' views of guidance made available to New Teachers by the end of the Probationary Year

arranged in total points, weighted mean and rank order

Question Statement :

By the end of the first year, a New Teacher's progress is assessed according to:

Item No	Question Items	Respon-dents	Points	Total Weight	Weighted Mean	%	Rank order
1.	The formerly referred to qualities of a good teacher & the criteria of a good teaching - lesson.	Teachers Heads Suprs.	63 100 24	187	$\frac{187}{83}$	2.25	4
2.	Comprehensive team evaluation consisting of supervisors, heads, students' academic achievement.	Ts. Hs. Suprs.	76 148 18	242	$\frac{242}{83}$	2.91	2
3.	His limited experience & not according to the ideal performance expected from old experienced Ts.	Ts. Hs. Suprs	26 85 18	129	$\frac{129}{83}$	1.55	7
4.	A written report carefully explaining the performance of the New Teacher.	Ts. Hs. Suprs.	52 78 18	148	$\frac{148}{83}$	1.78	5
5.	Suggestions & recommendations (feedback) to help a New Teacher correct & improve his performance.	Ts. Hs. Suprs.	52 126 18	196	$\frac{196}{83}$	2.46	3
6.	A meeting for listening to the points of view of new teacher whose efforts fell below the expectations of his seniors.	Ts. Hs. Suprs.	124 99 24	247	$\frac{247}{83}$	2.97	1
7.	A request for transference to a more suitable school is usually entertained and carefully studied.	Ts. Hs. Suprs	63 73 9	145	$\frac{145}{83}$	1.74	6

3.5 The Teaching Experiences of New Teachers throughout The First Year of Service.

3.5.1. Above 90% of respondent new teachers complained of the heavy burden of school teaching load and the so many extracurricular responsibilities with the result no time is left for keeping in touch with their university college in an attempt to solicit guidance. About 75% of teacher respondents indicated that the content of induction course were void of repetition to courses learned at pre-service education.

3.5.2. Above 80% of respondents indicated that they had had no written guide to assist them throughout their first year of teaching and strongly agreed to the suggestion of providing new teachers in the next year with such a helpful material.

3.5.3. As to sources of guidance available to new teachers, it was indicated that 60% of the guidance came from school heads; 30% from educational supervisors. and just about 10% was received from old handed colleagues at school.
When new teachers were asked about the extent of guidance received, 60% of respondents indicated that it was just enough and 30% Not enough & 10% no response.

3.5.4. Forty percent of respondent teachers indicated that they were required to teach subjects not falling within their field of specialization.

3.6. Problems Encountered by New Teachers :

3.6.1. Above 30% indicated lack of job-satisfaction about 20% would not like to attend in-service courses and also would not like to participate in extra-curricula activities. More than 48% No response.

3.6.2. About 33% referred to personal problems such as loneliness, fatigue because of school work, traveling, accommodation & financial problems.

3.6.3. The most frequent problems in the classroom were class discipline & order, absence of a method of teaching, lack of experience in teaching aids, incapability to build achievement tests, and inability to organize grades lists. Forty eight percent of respondents indicated that.

3.6.4. Most frequent students problems observed by new teachers in the school were : absent-mindedness, disturbance, truancy, weakness in school subjects. (37% indicated these problems).

3.7. Benefits Gained From Induction Courses :

Table (10) summarises the benefits indicated by New Teachers.

Table (10)

A Summary of benefits gained by new teachers from induction courses

Q: what benefits did you gain from attendance at induction courses ?	n	%
- Improvement of teaching methods	14	37.8
- Establishing good relationships with colleagues.	13	35.0
- Increasing self-confidence	6	16.2
- Paying more attention to teaching aids.	4	10.8
Total	37	100%

3.8. Suggestions for the Development of Future Induction Problems :

This question was addressed to professional leaders : heads and educational supervisors. The question was of the Open-ended type. In what follows are the suggestions presented according to rank order and percentages.

3.8.1. Induction should be organized before the commencement of the school year preferably during August each year. (31%)

3.8.2. New teachers should be interviewed by a committee of professionals & selection should be careful & objective. (30.7%)

3.8.3. Educational supervisors should present model lessons followed with an analysis of the components of the lesson. (29.1)

3.8.4. Invite old-handed teachers to help novice teachers learn from the successful experiences of their master teachers. (17%)

3.8.5. Trainers should be carefully selected & should strive to set an admirable example to others. Multiply occasions for intervisits among teachers. Training of New Ts. should make use of educational technology; micro-teaching is a case in point. (13.4%)

4. CONCLUSIONS

4.1. There is an apparent evidence pointing to the fact that educational authorities in Jordan are fully aware of the necessity and importance of inducting beginning teachers. The Guide for Inducting New Teachers issued by Ministry of Education, in 1995 emphasized the necessity for induction. This statement comes in line with the results of this paper which discovered that about 90% of the respondents believed that teacher education is a continuous process and should not end with graduation from college. This fact paves the way to future efforts exerted by the Ministry of education for inducting future new teachers.

4.2. In the meanwhile there is apparent discrepancy between the declarations of the Ministry of education as saying during the probationary year teachers who prove to be incompetent and unsuitable for the profession should be weeded out- On the theoretical level this declaration is both sound and wise but practitioners in the field believe that this step has never been taken and the regulations governing the dismissal of incompetent teachers remain intact. Perhaps, this element of leniency and clemency is monopolized by lethargical teachers.

4.3. To the researcher's understanding unless the regulations in this regard are put into effect.... sluggish teachers will not come to their senses & will continue to be a burden on themselves and on others.

4.4. It is customary to require new teachers to shoulder full teaching load besides other responsibilities and this lack of consideration for their delicate & peculiar situation may end with frustration & disappointment or with what is known as "reality shock".[1]

4.5. The situation under which new teachers serve grow graver when they are evaluated on the same bases with old handed teachers - in other words there is only one form for the assessment of all teachers & the criteria is the same for all... Worse than this new teachers know for sure no matter what they achieve of excellence & proficiency in their work they are not given an excellent estimation during the first year of service; hypothetically new teachers are never at the apex of their maturity during the first year. The worst part of the new teachers' conditions of service lies in not allowing him/her to apply for transference to another school which may be more suitable for him. His application has to que for four years then he/she has the permission to apply for that... I admit : to every rule there is an exception, but the rule is applied to all without exceptions unless there is very serious problems.

4.6. There is complete agreement between the official declarations recently appearing in the press and the views of respondents towards the importance of generic teaching skills; both parties consider mastery of basic teaching skills not only a must for every teacher but also a pre-requisite for teaching special subjects.

4.7. The findings of this study revealed so many problems encountered by new teachers, notably, those related to classroom teaching besides personal and students'... to leave a new teacher "to swim or sink" will be real dissipation of human sources and human sources are highly evaluated in Jordan at the highest official level. To translate this national goal into reality teachers should not be left to struggle alone.... "Heads and edal. supervisors are over burdened with clerical & professional duties; an educational supervisor has to look after around 100 teachers in Amman 1st directorate, 150 in suburbs & 250 in the private sector. This huge number of attendants leave very little time for edal supervisors to attend to New Ts. It is high time teachers with outstanding performance and sociable personalities took over this all-important job of providing support and guidance to a new teacher in his/her first year of employment. It is a truism that "for many beginning teachers the most significant positive force on their experience was the peer or support teacher. He/she was highly influential early in the year and increasingly influential as the year progressed.. He/she was valued as a source of practical information as well as a source of psychological support".[1]

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[1] Stephen P. Gordon. Assisting the Entry-Year Teacher : A Leadership Resource. Ohio Department of Education, 1990, p.5.

[1] Hoffman Edwards, O'Neal Barnes & Paulissen, 1986, "A study of state-mandated beginning teacher programs" Journal of Teacher Education, 37(1) pp. 16.21. Quoted by S.P. Gordon in Assisting the entry-year T. : A Leadership Source. Ohio Dept. of Educ. '90.

References

ALYAH, M.K.Y (1972)
"In-Service of Teacher Education in Kuwait" Unpublisted M.A. thesis, Educ. Dept. American Univ. of Beirut.

ALYAH, M.K.Y (1979)
"Guidelines for the Development of Primary Teacher Education in Kuwait" Unpublished Ph.D. thesis, Institute of Education, University of London.

ALYAH, M.K.Y (1982)
"A Case Study of Training of Educational Personnel in Kuwait" A report submitted to Unesco, (Monograph).

Bolam, R. (1973)
"Induction Programs for Probationary Teachers." A report, University of Bristol, (Monograph).

Bradley, Leo & Gordon, Stephen P.(1994).
"Comparing the Ideal & the Real in State-Mandated Teacher Induction Programs." in Journal of Staff Development. Vol. 15 No. 3 pp. 44-48.

Cochran, Smith, Marilyn & Paris, Cynthia L. (1995)
"Mentor and Mentoring : Did Homer Have It Right" in Critical Discourses On Teacher Development. e.d. John Smith Teacher Developt. Series. London. Cassell, pp. 181-203.

Earley, P. & Kinder, K. (1994)
Initiation Rights : Effective Induction Practices for New Ts. London : Slough. NFER.

Gibson, David G. (1995)
"Managing Probationer Teachers : A Case Study Approach" in Educational Review Vol. 47 No. 3. pp. 255-62.

Great Britain, Dept. of Educ. & Science (1992).
Induction of Newly-qualified ts. (Administrative Memorandum 2/92) London DES

Jordan Ministry of Information, (1995)
Jordan : Facts and Figures. Printing & Publication Department (in Arabic).

Jordan Ministry of Education.
The Educational Statistics Yearbook General Directorate of Educational Planning Statistics & Information Division. 1994-1995.

Kuwait Ministry of Education (1985).
A Guide to A New Teacher. A monograph produced by Human Resource Developt. Department. 78 pp. (in Arabic).

National Union of Teachers (N.U.T.), (1973)
The Induction of New Teachers.
Policy Statement, London : N.U.T.

N.U.T. (1979)
A Guide to First Appointment and Probationary Year Procedures. London : N.U.T.

Stammers, P. (1993)
"Maintaining that first year dream", British Journal of In-Service Education,Vol.19 No. 1, pp. 29-35.

Taylor, J.K. & Date, I.R. (1971), "A Survey of Teachers in their First Year of Service". University of Bristol.

Taylor, John & Dale, Ian. (1973)
"The First Year of Teaching "in the Education of Ts. in Britain, e.d. D.E. Lomax. John Wiley & Sons pp. 281-301.

Wood, F.H. & Thompson, S.R. (1993)
"Assumptions About Staff Development Based on Research & Best Practice." Journal of Staff Development. Vol. 14. No. 4. pp. 52-57.

THE ROLE OF TEACHER IN THE COMMUNITY SCHOOL

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INTRODUCTION

The concept of community education has evolved over decades, even centuries, years ago, the one room schoolhouse was considered the "house" of the community. At the turn of the century, John Dewey supported the idea of the school being an integral part of the community. Then in the 1950's, the concept of the community school" was conceived when the people of Flint, Michigan, in the United States of America opened the doors of their schools, not just to students, but to all citizens in an effort to unite the people in the resolution of community problems.

During this time, urban areas all over the United States were growing at an accelerated rate, creating unprecedented demands on government services, on the need for more housing, schools, hospitals, and so forth. In Florida State, for example, Dade community was building a new school and was considered one of the fastest growing communities in the Unites States. Miami established Florida's first community school in 1961 with the goal of encouraging an already existing resource, public schools, to share in the responsibility of finding solutions to the growing community's problems and needs (Community Education Bulletin, 1981).

The idea of community school became as a human resource centers to operate in close relationship with the educational, recreational ,cultural, and social agencies. Furthermore, there was the attempt to eliminate all unnecessary duplication within the community, to use the existing resources, human and physical, to solve identified community problems, and to attempt to bring back a "sense" of community (Glass & Sanders, 1978).

Jordan has moved further than most of the Arab states steward a pluralistic, democratic-based society, with freedom of the press and assembly guarantied. The considerable progress which Jordan achieved during the post 30 years under the direction of King Hussein, can be traced to its economic growth, social development, and education. The change of the political life, and the new developments in all fields, and the application of the democratic principals and human rights, all of this has led to an expand demand for educational programs throughout the country, and to the renewal of the concept of the Jordanian schools.

Study Objective and Question

The aim of this study was to analyze the role of teachers at the Jordanian schools in building a school community, and to introduce this concept to be implemented in Jordan, based on models and ideas of the community schools, and

779

the concept of community education which is implemented in the United States. In order for the community school to be established and implemented successfully, the Jordanian teachers should be aware of their new roles with regard to the new developments and new ideas that has occurred in the Jordanian society. This study is going to answer the following question: What are the new roles of community school teacher?

Purpose of the Study

The purpose of this study was to identify the role of teacher for building a community school in Jordan and to cope with the concept of the principal characteristics of a community school. It was intended to introduce the concept of a community school based on the concept of community education.

Instrument

Fifty one items have been developed to cover seven dimension skills which describes the role of the community school teacher as follows:

- Community communication skills (items 1-5).
- Utilization of community resources (item 6-11).
- Contribution of continuing education for people in the community (items 12-19).
- Contribution in human and social activities in the community (items 20-31).
- Contribution of economic and social development (items 32-37).
- Contribution of implementing full school services (items 38-42).
- Parents teacher communication skills (items 43-51).
- Psychometric indices and some validation procedure have been implemented to assure the reliability, simplicity and validity of this tool. The whole instrument is shown in Appendix I.

Operational Definitions

Some terms have been appeared in this study, these are the operational definitions:

Class Teacher: A teacher who teaches all subject matters to students from 1st to 4th grade.
Community School: A school which opens its doors to the community, and contribute to the social, economic, and cultural changes in the community.
Community Education Teacher: A school teacher who participate in school activities and services to serve the community.

The community school teacher in Jordan has to be aware and prepared to possess several competency skills which will enable him to educate people in the community and introduce these new concepts such as: the lasting peace, human rights, family organization, women's role in development plans, and other new world concepts the have occurred in the Jordanian society.

Sample and Population

The population of this study consisted of 980 students who are studying at the teacher education program at the college of educational sciences at Yarmouk university.

A stratified random sample of 200 students were selected, which represents 20% of the total population sample. The number of questionnaire collected were 171, which represents 85.5% of the population of this study.

Table (1) shows the distribution of population sample of the study.

Table (1)
Distribution of the sample population

Gender	No. of questionnaire	percentage	No. of questionnaires collected	Percentage
Male	110	55%	104	94.5%
Female	90	45%	67	74.4%
Total	200	100%	200	

Review of The Literature

The community school movement had its beginning in Flint, Michigan, in the United States in 1932 to serve the auto industry and economic hard times faced the community, and the unstable educational system meant little financial support for the schools. Related to the educational situation was the beginning of several community problems.

The community school concept is often used synonymously with several terms: "the open-door policy", the lighted school house," and "the neighborhood school". The neighborhood school or community school is simply a school within easy access of local residents; access meaning a close proximity to where people live, a school open most hours of the year, and educational programs designed for, and in cooperation with, the residents (Hiemstra).

Mention should be made of the difference between the terms "community education" and community school". the two are not synonymous. community education is a process; the community school is a vehicle.

The community school is a physical plant that is owned by the citizens, easily identified within a community, and where many community education programs and services are housed.

Community education is not under the umbrella of community schools; community schools under the umbrella of community education. Community education reaches into all the hooks and crannies of a community and far exceeds the boundaries of a schoolhouse.

The community school, however, should not be thought of as an appendage to the regular day school. It does not open its doors to the community after the 3 o'clock bell rings. Instead, it serves the community whenever the need arises regardless of time of day or the month of the year.

Hiemstra (1972), indicated that the community school teacher will also perform somewhat different roles. He or she will relate much more closely what happens in the classroom to the home and to the community. Some teachers will visit homes to better determine and understand educational needs. Other teachers will work with parents and students in supplemental educational activities in the home and in the community. Other teachers will have at least partial assignment working with adult and community education activities. Finally, some teachers will assume leadership roles over groups of teachers, paraprofessionals, and volunteers, probably in a single curricular area, to bring direction to the total educational efforts. If teachers are not specifically trained by universities to perform in these roles, in-service training through the schools will probably be necessary.

Decker and Romney (1992) defined six types of family-community- school collaboration which clarify the concept of the community schools, these types are:

1- School help for families-schools providing assistance to families in relation to the families' basic obligation: responsibilities for the children's health and safety; supervision, discipline, and guidance for children at each age leave; and positive home conditions that support school learning and behavior appropriate for each grade level.

2- School-home communication- the basic obligation of schools to communicate from school to home about school programs and children's progress, including the use of letters, phone calls, report cards, newsletters, conferences, and other mechanisms.

3- Family help for schools- the involvement in school of parent and community volunteers who assist teachers, administrators, and children in classrooms and other areas of the schools. Parents and others, who come to the school to support and watch student performances, sports, and other events.

4- Involvement in learning activities at home-parent initiated and children initiated request for help and, particularly, ideas from teachers for parents to monitor or assist their own children at home in learning activities that can be coordinated with the children's classroom instruction.

5- Involvement in governance, decision-making, and advocacy-parents and other community residents in advisory, decision-making, or advocacy roles in parent associations, advisory committees, and school improvement or school site councils or in independent advocacy groups that monitor schools or work for school improvement.

6- Collaboration and exchange with the community- involvement of any of the institutions that have some responsibility for children's development and success. This includes programs that provide access to and coordinate community and support services for children and their families, and other arrangements that draw on community resources to support children learning.

Study Result and Discussion

Each individual in the study sample exposed to the study tool and responded to the seven dimension skills included in the questionnaire. The respondents were asked to respond to skills offered at the teacher education program at Yarmouk university and mark their responses with accordance to the five levels in Likert Scales, 1= Very Low, 2= Low, 3= Average, 4= High, 5= Very High. The following design has been used to answer the question of this study:

- 1.-1.81 Very Low.
- 1.82-2.61 Low.
- 2.62-3.42 Average.
- 3.43-4.22 High.
- 4.23-5.00 Very High.

To answer the research questions, simple descriptive statistics were used, mean, standard deviation, and presented in Table (1) through Table (8). The mean and standard deviation had been calculated for the seven dimension skills which included fifty- one item.

The data in Table (1) shows that the teacher education program at Yarmouk university provide teachers with skills needed in the community school ranked as follows:

Ist: Full school service skills, 2nd: Parents teachers communication skills, 3rd: Community resources utilization skills, 4th: Community social and human skills, 5th: Parents teachers communication skills, 6th: Continuing education skills, 7th: Economic and community growth skills.

Tables (2) to (9) will deal with each skill in more details.

Table (2)
Descriptive Statistics of Full School Services Skills

Rank	Skills	Mean	Standard Deviation
1	41	3.96	0.96
2	39	3.71	1.14
3	42	3.66	1.04
4	40	3.63	1.08
5	38	3.22	1.28
Total		3.66	

This table shows that "Full School Services Skills", offered at the teacher education program at Yarmouk university, are on an "average", highlight with means range between (3.22-3.96). Skill number. (41) which focuses on "providing instruction and guidance services to students", ranked number (1) with a mean of (3.96).

Table (3)
Descriptive Statistics of Communication Skills With The Local Community

No	Skill	Rank	Mean	S.D
1	2	1	3.39	1.15
2	1	2	3.33	1.21
3	4	3	3.22	1.18
4	3	4	3.16	1.20
5	5	5	2.81	1.43
Total		6	15.91	

This table shows that "Communication Skills With The Local Community" offered at the teacher education program at Yarmouk university, are on an "average", highlight with means range between (2.81-3.39). Skill number. (2) which focuses on "participating with school staff with the local community activities", ranked number (1) with a mean of (3.39).

Table (4)
Descriptive Statistics of Community Resources Utilization Skills

No	Skill	Rank	Mean	Slandered Deviation
1	11	1	3.74	1.11
2	6	2	3.39	1.20
3	10	3	3.25	1.27
4	8	4	3.22	1.37
5	7	5	3.10	
6	9	6	3.07	1.02
Total			19.78	

This table shows that "Community Resources Utilization Skills", at the teacher education program at Yarmouk university, are on an "average", highlight with means range between (3.07-3.74). Skill number. (11) which focuses on "giving chance to parents and the local residents to participate in school activities", ranked number (1) with a mean of (3.74).

Table (5)
Descriptive Statistics of Community Social and Human Skills

Rank	Skill	Rank	Mean	Standard Deviation
1	21	1	3.78	1.13
2	26	2	3.40	1.29
3	22	3	3.36	1.17
4	31	4	3.34	1.29
5	27	5	3.30	1.22
6	25	6	3.27	1.34
7	23	7	3.23	1.27
8	28	8	3.13	1.34
9	20	9	3.04	1.33
10	24	10	3.03	1.32
11	29	11	2.79	1.16
12	30	12	2.78	1.25
Total		12	38.45	

This table shows that "Community Social and Human Skills", offered at the teacher training program at Yarmouk university are on an "average", highlight with means range between (2.78-3.78). Skill number. (21) which focuses on "encouraging students to participate in national and social activities", ranked number (1) with a mean of (3.78).

Table (6)
Descriptive Statistics of Parents Teachers Communication Skills

No	Skill	Rank	Mean	Standard Deviation
1	46	1	3.25	1.15
2	47	2	3.49	1.18
3	43	3	3.44	1.25
4	50	4	3.42	1.24
5	44	5	3.33	1.23
6	45	6	3.31	1.25
7	48	7	3.21	1.16
8	49	8	3.13	1.22
9	51	9	2.71	1.37
Total		9	29.29	

This table shows that "Parents Teachers Communication Skills" offered at the teacher training program at Yarmouk university, are on an "average", highlight with means range between (2.71-3.25). Skill number. (46) which focuses on "working with parents to prepare students for new concepts appeared in the Jordanian society", ranked number (1) with a mean of (3.55).

Table (7)
Descriptive Statistics of Continuing Education Skills

No	Skill	Rank	Mean	Standard Deviation
1	13	1	3.32	1.26
2	12	2	3.00	1.35
3	18	3	2.98	1.41
4	15	4	2.86	1.39
5	16	5	2.80	1.36
6	19	6	2.77	1.36
7	14	7	2.74	1.33
8	17	8	2.55	1.44
Total		8	23.02	

This table shows that "Continuing Education Skills", offered at the teacher education program at Yarmouk university, are on an "average", highlight with means range between (2.55-3.32). Skill number. (13) which focuses on "participating to provide different and developmental lifelong resources", ranked number (1) with a mean of (3.74).

Table (8)
Descriptive Statistics of Economics and Community Growth Skills

No	Skill	Rank	Mean	Standard Deviation
1	37	1	3.11	1.34
2	36	2	2.86	1.43
3	34	3	2.84	1.33
4	33	4	2.79	1.38
5	35	5	2.75	1.35
6	32	6	2.63	1.27
Total		6	16.98	

This table shows that "Economic Skills With Local Community", offered at the teacher education program at Yarmouk university, are on an "average", highlight with means range between (2.63-3.11).. Skill number (37) which focuses on "educating the local residents in job specialty", ranked number (1) with a mean of (3.11).

Table (9)
Descriptive Statistics Teachers' Skills In The Community School

No	Field	Rank	Mean
1	Full school service skills	1	3.66
2	Parents teachers communication skills	2	3.51
3	Community resources utilization skills	3	3.29
4	Parents teachers communication skills	4	3.25
5	Community social and human skills	5	3.20
6	Continuing education skills	6	2.84
7	Economic and community growth skills	7	2.83

RECOMMENDATIONS

Based on the results of the this study the following recommendations were as follows:

1 The community school teacher in Jordan should be aware of the community school concept, and should possess different skills such as: community communication skills, continuing education skills, human and social activity skills, economic and community growth skills, full school services skills, and parent teacher communication skills.

2 The teacher education program at the college of educational sciences should focus strongly on the skills that described in full school services dimension, parents teachers communication skills, and community resources utilization skills.

786

3 Based on the new changes and development which occurred in the Jordanian society in many fields and aspects such as: cultural, social, economic, scientific and technological aspects, a need for comprehensive review of all courses to be included at the teacher training program to accommodate these new changes and development.

References

Boyer, Ernest L. (1990) (Former U. S Commissioner of Education and Chancellor of the State University of New York). Service: Linking Schools to life.

Burden, Larry and Whitt, Robert (1973). The Community School Principal. Midland, MI: Pendell.

Coolidge, T. Jefferson. "The Thomas Jefferson Forum Starting Small, Thinking Big". Community Education Journal, October 1987, pp. 26- 27.

Decker, Larry E. and Associates (1992). Community Education: Building Learning Communities. Alexandria, VA: National Community Education Association.

Decker Larry E. Romney, Valerie A. (1992) Educational Restructring and the Community Education Process. Alexandria, V A: University of Virginia.

Durian, G. (1986). Effective Schooling and At- Risk Youth: what the Research Shows. Office of Educational Research and Improvement, (ED), Washington Dc, p. 5.

Henson, O. M. (1988), Junel. Class Notes and Discussion. EA 845, Simulated School Administration. Emporia State University, Emporia, KS

Hiemstra, Roger (1972). The Educative Community Lincoln. Professional Educators.

Hoffman, Ellen. Teachers and Community Service: A Plus for Both. Washington, D. C: Education Writers Association, April 1987, p. 68.

Holmes, M., Wynne, E. A. (1989). Making the School and Effective Community: Belief, Practice, and Theory in School Administration. New York: Falmer Press.

Honnet, Ellen Porter and Poulsen, Susan J. (1989). Principles of Good Practice Combinig Service and Learning. Wingspread Special Report. The Johnson Foundation, Racine, WI.

Kendall, M. A. (1989 January). People . The School Administrator, 46 (1), 39.

Kowalski, Theodore JH. and Fallon, John A. (1986). Community Education: Processes and Programs. Bloomington, Indiana: Phi Delta Kappa.

Lewis, Anne C. Facts and Faith: A Status Report on Youth Service. Washington, D. C: William T. Grant Foundation; Commission on Work, Family, and Citizenship, August 1988, p. 56.

Lipka, Richarch P. and others. Community Service Projects: Citizenship in Action. (Fastback 231). Bloomington, IN: Phi Delta Kappa Educational Fundation, 1985, p. 32.

Marburger, C. L (1985). One School At a Time School Based Mangement, A Process for Change. The National Committee for Citizens in Education. Colambia, MD.

Miles, M. B. (Ed). (1964). On Temporary System: Innovation in Education, New York: Teachers College Press.

Newmann, Fred M. and Rutter, Robert A. "A Profile of High School Community Service Program." Educational Leadership, V 43, n4, p. 65- 71, December 1985- January 1986.

Oklahoma Community Education Advisory Council Association (1993). Advisory Council Handbook. Stillwater, Oklahoma.

Ringers, Joseph, Jr. Developing, Managing and operating Community Service Centers. Charlottesville, VA: Virginia University, Mid- Atlantac Center for Community Education, August 1981, P. 112.

Schmuch, R. A., Miles, M. B. (Eds.). (1971). Organization Development in Schools. Palo Alto California: National Press Books.

Staples, Brian (1993). Life Centred Schools. Canadian Assocaition for Community Education Canada.

Stewart, James 1x1. and others (1992). Planning Handbook for Community Education Programs. University of Wisconsin, River Falls, Wisconsin.

Stiegelbauer, S. M. (1984, January). Research on the Improvement Process Program. Austin, T: Research and Development Center for Teacher Education, University of Texas, Reciew# 2, pp. 1-2, 6.

Tarawneh, K.Y., (1992). A Descriptive Study to Evaluate the Effects of Jordan's 1987 National Conference for Educational Reform. Unpublished Dissertation, Emporia State University. Emporia, Kansas.

Tarawneh, E. (1990). The Attitude of High School Students, Teachers, Principals, and other Administrators Toward Public High School Education in Jordan. Unpuplished Ed. S. Thesis, Emporia State University, Emporia, KS.

The Carnegie Foundation. (1983). In High School. A Report on Secondary Education in America, A Coolege.

Thomas, M. D. Sorenson, L. (1983) Novermber). South High School An Effective Inner- City School. NASSP Bulletin, 36, pp. 36- 39.

West Virginia Departent of Education (1992). Manual of Operations for Community Education. Charleston, West Virginia.

William T. Grant Foundation Commission on work, Family and Citizenship (1988). Pathways to Success for America's Youth and Young Families. washington, D.C.

Appendix I

The Role of Teacher In The Community School

A- 1. Gender ☐ Male ☐ Female

2. Years of Experience

☐ 1-5 Years ☐ 6-10 years ☐ 11 years or more

3. Specialization ☐ Science ☐ Literary

B- Questionnaire Fields and Items:

		Degree of Agreement				
No	Items	very High	High	Average	Low	Very Low
	First: Communication Skills With The local Community					
1	Participation to increase the cultural school involvement with the local community through seminars and lectures.					
2	Participation with school staff with the local community activities.					
3	Participation with school to form the culture of the local community.					
4	Participation with school administration to enrich the local community knowledge of education.					
5	Holding workshops for parents to help them educate their children.					
Second: Community Resources Utilization Skills.						
6	Developing strategies and plans for the local community to use school facilities.					
7	Encouraging school to open its doors for distinctive community members and use its facilities.					
8	Communication with local individuals in the community specialized in different fields.					
9	Encouraging parents to provide services to students and school in matters related to environment education.					

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		Degree of Agreement				
No	Items	very High	High	Average	Low	Very Low
10	Reaching out with parents and the local residents in the community to provide help needed to students and school (school yard, school building ...etc.)					
11	Giving chance to parents and the local residents in the community to participate in school.					
Third: Continuing Education Skills .						
12	Giving special attention to educate senior citizens, youngsters, women, talented, and people with special needs in the community.					
13	Participating to provide different and developmental lifelong learning resources.					
15	Providing training workshops to the local residents in the community in job literacy.					
16	Participating in literacy workshops for residents in the local community.					
17	Providing workshops in child care for women with accordance to new educational procedures used at schools.					
18	Educating local residents and parents in children's rights.					
19	Conducting workshops and presentation sessions for local residents and organizations to deal with democracy subjects.					
Fourth: Contribution in Community Social and Human Skills.						
20	Defining the Jordanian community needs and suggest strategies to meet them.					
21	Encouraging students to participate in national and social activities.					
22	Supporting the local community by providing exports in educational and child matters.					

		Degree of Agreement				
No	Items	very High	High	Average	Low	Very Low
23	Contributing in providing help needed for the local residents to improve their way of life.					
24	Conducting courses and seminars for the local residents in the social development.					
25	Contributing in health education and awareness for the local residents.					
26	Contributing in religious and cultural awareness for the local residents through programs and seminars.					
27	Inviting the local community members to participate in environment preservation.					
28	Contributing with students to help the local residents in the community in corps collecting.					
29	Contributing in improving municipality council performance.					
30	Providing suggested solutions to solve community issues.					
Fifth: Contributing In Economic and Community Growth.						
31	Leading group to clean and beautifying the local community members to participate in environment preservation.					
28	Contributing with students to help the local residents in the community in crops collecting.					
29	Contributing in improving municipality council performance.					
30	Providing suggested solutions to solve community issues.					

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		Degree of Agreement				
No	Items	very High	High	Average	Low	Very Low
31	Leading group to clean and beautify the environment.					
32	Contributing with local residents in designing economic projects to serve the community.					
33	Encouraging companies, factories, and establishments to train students.					
34	Cooperating with farmers and businessmen to educates students in raw materials use.					
35	Educating and helping the local residents in establishing economic projects.					
36	Educating the local residents in the population growth and issues.					
37	Educating the local residents in jobs specialty.					
Sixth: Full School Services Skills						
38	Contributing with school administration and teachers in democratic and human rights issues.					
39	Planning school activities in student personal growth.					
40	Providing services to students to help them accommodate with the community.					
41	Providing instruction and guidance services to students.					

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		Degree of Agreement				
No	Items	very High	High	Average	Low	Very Low
Seventh: Parents Teachers Communication Skills.						
42	Train students to gain skills in scientific problem solving procedure.					
44	Effective contribution with parents through seminars dealing with education and community problems.					
45	Concentrating on community school new role and educate parents tin this regard.					
46	Working with parents to prepare students for new concepts appeared in the Jordanian.					
47	Educate parents to guide their children to coincide with new school concept.					
48	Conducting programs and activities for students for use of community resources.					
49	Designing special programs to help students provide social and human services to the community.					
50	Developing communication skill with parents and students to understand the Jordanian society changes.					
51	Organizing home visits to provide health and home economic advises.					
43	Communicating with parents to educate their children in new concepts appeared in the Jordanian community.					

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TEACHERS' PROFESSIONAL DEVELOPMENT: A RE-EXAMINATION IN AN ERA OF REFORM

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INTRODUCTION

In the late 1980s, and more so in the mid 1990s, talk of *reform* has filled the corridors of schools and universities in the US and Europe. Educators, once again, have turned to finding new ways of making schools more effective and make learning more meaningful. In the past decade a variety of new ideas have posed a challenge for educators to re-examine and reflect on long-established practices in curriculum design, methodology, assessment, teacher education, and professional development. Numerous calls were made to consider novel ways of teaching and of organizing students' learning experiences. Consequently *restructuring* became a key word in the language of contemporary education reform to characterize changes needed in the organizational structure of school. In Elmore and Associates' (1990) view, the purpose of restructuring was to transform the nature of teachers' work and to reorganize governance systems Peterson McCarthy and Filmore (1996) suggest at the center of debate on school system reform is the idea that, by changing the ways in which schools are organized, educators can change how teachers teach and increase the opportunities for student learning.

Articles and studies on the topic of education reform speak to the complexity of this endeavor. Elmore (1995) notes that policy research has long demonstrated that reform is not simply a matter of getting the policy right; influences ranging from the political, social, and economic culture to the norms and knowledge structures of educators affect teaching and learning. The relationship between structural change in schools and changes in teaching and learning are mediated by relatively powerful factors, such as the shared norms, knowledge and skill of teachers, and that changing structure has a slippery and unreliable relationship to these mediating factors.

One implication of this finding for reformers according to Elmore (1995) is that reforms might Focus first on changing norms, knowledge, and skills at the individual and organizational level before the focus on changing structure That is, teachers might actually learn to teach differently and develop shared expectations and beliefs about what good teaching is, and them invent the organizational structures that go with those shared skills, expectations, and beliefs. It would also require reformers to invest more heavily in developing the 'knowledge and skills teachers, rather than in moving boxes round in a structure.

In a powerful article. Darling-Hammond (1996) argues that current efforts at school and education reform are likely to succeed to the extent that they are built on a strong foundation of teaching knowledge and are sustained by a commitment to structural rather than merely symbolic change. Major changes in the productivity of schools rest on our ability to create and sustain a highly prepared teaching force for all our students.

New Ideas for Teacher Preparation

Current effort to reform the school system seeks to develop not only new or re-framed conceptions of teaching, learning, and schooling, but also a wide variety of practices that support teacher learning (Liberman, 1995). Transforming schooling and teaching, however, is more than a question of inserting a new curriculum or a new program. It also involves thinking through how the content and process of learning can be redefined in ways that engage students and teachers in the active pursuit of learning goals; it involves a joining of experiential learning and content.

Despite the fact that these practices run counter to some deeply held notions about staff development and inservice education that have long influenced educators' and the public's views of teachers. changes are currently taking place in teacher education programs across the world, and especially in the US and in Europe. These changes are partly in response to major changes affecting world societies and schools all over the world. Because rapid social and economic transformations require greater learning from students, society is reshaping the mission of education. Today's Schools are now expected not only to *offer education,* but to *ensure learning.* Teachers are expected not only to "cover the curriculum" but to create a bridge between the needs of each learner and the attainment of challenging learning goals (Darling-Hammond, 1996).

Over the past decade, many schools of education in the US and Europe have made great strides in incorporating new understandings of teaching and learning into their programs for prospective teachers. More attention to learning and cognition has accompanied a deepening appreciation for content pedagogy and constructivist teaching In addition. teacher preparation and induction programs are increasingly helping prospective teachers and interns develop a reflective, problem-solving orientation by engaging them in teacher research, school-based inquiry, and inquiry into student's experiences. These approaches help teachers build an empirical understanding of learners and a capacity to analyze what occurs in their classrooms and in the lives of their students.

Current Practices in Teacher Education and Professional Development

Although sophistication about the process of restructuring schools and the problems of changing school cultures is growing, it is still widely accepted that staff learning and professional development take place primarily at a series of workshops , at a conference, or with the help of a long-term consultant. Darling-Hammond (1996), among others, notes that what everyone appears to want for students – a wide array of learning opportunities that engage students in experiencing, creating, and solving real problems, using their own experiences and working with others -- is for some reason denied to teachers when they are the learners. In the traditional view of staff development, workshops and conferences conducted outside the school count, but authentic opportunities to learn from and with colleagues inside and outside school boundaries do not.

Of recently, a growing body of evidence, both theoretical and empirical is beginning to highlight the limitations of such traditional approaches to teacher education and teacher development. Issues and concerns have been voiced in several recent publications about the inadequacy and inappropriateness of knowledge, procedures, mechanisms, and learning opportunities in the field. These limitations have prompted calls for changes in the content and structure of teacher education programs; changes that are broad in nature and that involve moving teachers beyond simply learning about new ideas or about frameworks for understanding teaching practice to being actively involved in decisions about the substance, the process, and the organizational supports for learning in schools and thence to locating broader support mechanisms, such as networks or partnerships, that provide opportunities for learning and innovation. The main ideas about the limitations and concerns as proposed by Darling -Hammond (1995, 1996), Darling-Hmmond and McLaughlin (1995), and Liberman (1995), among others, could be summarized as follows:

1) Teachers' professional development has been limited by lack of knowledge about how teachers learn.

2) Teachers' definitions of the problems of practice have often been ignored (top-down approach).

3) Teaching has been described as a set of technical skills, leaving little room for invention and building of craft knowledge.

4) Strategies for change have often not considered the importance of support mechanisms and the necessity of learning over time.

5) Time and the necessary mechanisms for inventing, as well as consuming, new knowledge has been absent from schools.

Possibilities for Transforming Teaching

The traditional view of staff development as a transferable package of knowledge to be distributed to teachers in bite-sized pieces is undergoing radical rethinking. It implies a limited conception of teacher learning that is out of step with current research and practice. A central component of recent educational reform efforts has been the recognition that the commitment of teachers, the re-examination of teacher education approaches and practices, the availability of in-school as well as out-of-school support systems for professional development, and teachers' willingness to join the process of change, are essential for real changes to occur. Thus, unless reformers build constituencies for change both within the schools and within the community, most reform efforts will fail (Sarason, 1990).

Several current efforts hold great promise to transform schooling and teaching: redesigning initial teacher preparation. rethinking professional development; moving from "direct teaching" to facilitating "in-school learning," involving teachers in research, collaborative inquiry, standard-setting in the profession. and transforming schools into learning organizations for teachers (Darling-Hammond,' 1995, 1996: Elmore. 1995. Liberman, 1995, Richards and Lockhart,' 1995). In such reformed schools' people engage collectively in critical thinking, reflecting, problem solving, and other cognitively-oriented activities.

Policy Guidelines for Professional Development in an Era of Reform

Reformers of all stripes press for an agenda of fundamental change in the ways teachers teach and students learn. They envision schools in which students learn to think creatively and deeply, in which teachers' ongoing learning forms the core of professional activities, and in which students and teachers alike value knowing why and how to learn. However new initiatives cannot by themselves promote meaningful or long-term change in teachers, practices if they are embedded in a policy structure that t at odds with the vision of and teacher learning that reforms seek to bring alive. According to Liberman

(1995), new capacity-building policies that support professional development in an era of reform involve, among other things:

a) reducing the isolation of teachers by means of engaging them in collaborative activities inside and outside school;

b) encouraging teachers to assume the role of learner rather than that of "teacher as expert";

c) providing a rich and diverse menu of opportunities for teachers to learn;

d) linking professional development opportunities to meaningful content and change efforts;

e) establishing an environment of professional trust and encouraging problem solving;

f) providing opportunities for everyone involved in schools to understand new visions of teaching and learning;

g) making possible the restructuring of time, space, and scale within schools, and

h) focusing on learner-centered outcomes that give priority to learning how and why, (i.e., acquiring procedural and conditional knowledge along with factual or declarative knowledge).

Capacity-building policies view knowledge as constructed by and with practitioners for use in their own contexts, rather than as something conveyed by policy makers as a single solution for top- down implementation.

Toward Reflective Practice

The last decade has witnessed a growing emphasis on teacher professionalism. A different type of person is entering the profession, a person who has been better prepared to take on professional responsibilities. Part of being professional implies engaging in reflective practice (Schon 1983, 1987; Wallace, 1994).

Since the early eighties a number of approaches to teacher development have been proposed and implemented in classrooms These approaches include the teacher-as-researcher, clinical supervision, among others. Another form of inquiry intended to help teachers. Improve their practice and their professional capacities is reflective teaching popularized by Cruickshank (Cruickshank and Applegate. (1981) and Zeichner (Zeichner, 1981-2). Reflective teaching, like most teacher-based forms of self-inquiry, is an easy process. It involves a major shift in emphasis in our thinking and acting. Becoming reflective forces us to adopt a critical attitude to ourselves as individual teachers--to challenge our espoused personal beliefs about teaching. Becoming reflective through testing our practice systematically also challenges us to think about the influence we directly or indirectly exert on the formation of society in our role as teachers. Becoming reflective also extends beyond ourselves, making possible a similar form of self-inquiry in students.

The process of becoming a reflective practitioner is, at its heart' one with no end or termination. Rather it is an ongoing commitment to growth, change, development, and improvement (Brubacher 1994). Reflective educators are constantly testing the assumptions and inferences they have made about their work as teachers As Donald Schon (1987) has suggested, reflective practice is in essence a kind of "reflective conversation" involving the educator, students, parents and other teachers. Educators need to realize that their actions as teachers take place in a context of meanings in which other participants have different interpretations and understandings indeed different constructions of reality. It is important that these different. and sometimes competing, interpretations understandings, and constructions of reality be taken into account to as great an extent as possible by the reflective educator.

Brubacher (1994), among others, offers some suggestions to help teachers become increasingly reflective. These activities include journals' portraitures, professional development activities, and action research. The biggest challenge facing teachers, though, is actually deciding to make the commitment to become reflective educators. Once on the road to reflective practice, teachers will find that there are many interesting and valuable paths that they can follow toward the goal of becoming increasingly reflective as a professional educator One has to bear in mind, however that there is no simple formula for success, nor is there any guaranteed way in which one can be totally assured of becoming a reflective educator.

Teachers As Learners

If reform plans in teacher education are to be made operational thus enabling teachers to really change the way they work then teachers must have opportunities to discuss, think about, try out, and polish new practices. This means that they must be involved in learning about, developing, and using new ideas with their students. Teacher development must focus on deepening teachers' understanding of teaching and learning and of the students they teach. Thus, effective professional development involves teachers both as earners and as teachers and allows them to struggle with the uncertainties that accompany each role

Darling-Hammond & McLaughlin, 1995). Schools therefore, should be transformed into learning organizations in which people work together to solve problems collectively This implies more than inserting a new curriculum or a new program. It also involves thinking through how the content and process of learning can be redefined in ways that engage students and teachers in the active pursuit of learning goals, it involves a joining of experiential learning and content learning.

The ways teachers learn may be more like the ways students learn than we have previously recognized Learning theorists and organizational theorists tell us that people learn best through active involvement and through thinking about and becoming articulate about what they have learned. Processes, practices, and policies that are built on this view of learning are at the heart of a more expanded view of teacher development that encourages teachers to involve themselves as learners in much the same way as they wish their students would This will necessarily involve strategies and mechanisms that are more long-range' that are more concerned with interactions among teachers, and that are often unique to a particular context

Teachers can fulfill their role as learners in a number of ways Chief among these, according to Lieberman (1995) include the following

a) Building new roles (e.g., teacher leader, peer coach, teacher researcher).

b) Creating new structures (e.g., problem solving groups, decision-making teams).

c) Working on new tasks (e.g. journal and proposal writing, learning about assessment, creating standards, analyzing or writing case studies of practice).

d) Creating a culture of inquiry, wherein professional learning is expected, sought after, and an ongoing part of teaching and school life.

What characterizes these examples of professional learning is that their life span is not one or two days. Instead, they become part of the expectations for teachers' roles and form an integral part of the culture of a school. Moreover, these new approaches encourage teachers to experience for themselves the struggle personal and intellectual growth that is essential for learning. Teachers who use these approaches become sensitized to the nuances of learning and to the needs of individual and groups.

in-School Mechanisms of Support

Little attention is directed in schools at *how* to develop schools as organizations that nurture the professionals who work within them. Building closer and more caring professional communities, developing democratic interchange, and embedding the study of teaching into the work day can have considerable effect on professional ethos (Joyce & Calhoun, 1995) The caring dimension depends to a large extent on creating organizations where many small groups often composed of only three or four people see themselves as not only working together to get the job done, but also as responsible for supporting one another in developing personally and professionally Thus, the larger group or community both supports and is supported by small groups charged with:

a) inquiring into teaching and learning, and
b) supporting one another and the organization as a collaborative unit.

Teacher Networks

Ultimately. the quality of teaching depends not only on the qualities of those who enter and stay, but also on workplace factors. Teachers who feel enabled to succeed with students are more committed and effective than those who feel unsupported in their learning and their practice (McLaughlin and Talbert (1993). Those who have access to networks, enriched professional roles and collegial work feel more efficacious in gaining the knowledge they need to meet the needs of their students and more positive about staying in profession.

Networks, in particular. engage people in collective work on authentic problems and decision making and bring them face to face with other people and possibilities Some in-school networks may require some type organizational and pedagogical changes (e.g., common planning periods). The value of the network system as a support mechanism lies in the fact that they put new and experienced teachers together to learn from one another, to make connections across subject areas, to use staff expertise to provide leadership for "in-house" workshops or meetings, to form self-contained teams with organizational structures conducive to constant Staff learning, and to develop curricular changes that encourage interdisciplinary studies for short periods of time.

The Role of Teaming and Liaisons in Teacher Learning

Certain support structures provide the opportunities to teachers for the learning of new teaching practices and new strategies for student learning. Teaming structures, for example, facilitate teacher interactions and provide the time and possibilities for teachers to discuss important issues in teaching and learning. In addition such opportunities for teaming and shared decision making contribute to increased feelings of empowerment by the teachers. However, merely providing the time and situation does not guarantee classroom changes; that is, structures, by themselves, do not cause learning to occur. If changes are to take place discussions should not be limited to talk about generic themes, activities related to a topic, or procedural matters but be extended to include issues relating to different approaches to curriculum design and implementation, assessment of student outcomes, and learning in general (Peterson et al., 1996).

Investigating the Phenomenon of Teaming and Networking in Palestinian Schools and Teacher

Learning Centers

Formal and informal discussion with inservice teachers revealed that although most teachers believe that the organization into teams is an essential ingredient in success for both learners and teachers, they were quick to admit that. for different organizational and professional reasons, staff and team meetings generally served as a place for discussion of school routines and procedures rather than for discussion or sharing of ideas about curriculum and learning. Peterson et al. (1996) suggest that one way of overcoming these problems and of making a team cohesive and productive is a liaison among a local university a professional development center or a support system, and the school. The liaison could be an experienced teacher with connection to all parties involved and who would play a key role in introducing new ideas to the teachers, facilitating and enriching team discussion and modeling innovative instructional methods and techniques (e.g., interactive teaching techniques such as questioning, feedback, and elaboration). As a professional community and with the help of a liaison, the teachers in the team work on developing their knowledge of their students' learning as will as on developing and refining their classroom practice. To ensure success, such efforts and activities should be guided by the well-developed vision of learning and teaching (for example, learning as the active construction of knowledge by the individual and teaching as the facilitation of that process for individual students).

The investigation has also revealed that teachers who reported having links to several supportive communities within and outside school had greater opportunities to engage in conversations at a variety of levels. They had conversations about teaching within the team and with university professor(s) through he courses they take. Through these conversations, teachers are also linked to larger professional and academic discourse communities.

Teachers in both the graduate and undergraduate teacher education programs at Birzeit University are encouraged to expand the focus of their staff and team meetings inside and outside school --to cover procedural and generic issues as well as context-specific action research presentations, The consequence of this is that instructional practices are continually being informed by what teachers are collectively learning.

Teacher/Researcher

Efforts to develop teachers as managers of their own inquiry stand in contrast to earlier assumptions about teacher induction and about teaching generally: beginning teachers need to focus only on the most rudimentary tasks of teaching with cookbook rules to guide them. and more seasoned teachers should be the recipients, not generators, of knowledge (Darling-Hammond & McLaughlin, 1995).

This section takes as its point of departure the notion that classroom teachers both novices and experienced should be involved in curriculum and assessment research and development as these relate to their own classrooms and that a primary goal for inservice teacher education is to give teachers ways of exploring their own classrooms. This, of course, would help undermine the dichotomy between theory and practice which has been identified as an unfortunate but typical consequence of the "applied science', model of professional education (Wallace, 1994), Such involvement, however presupposes certain skills and knowledge in classroom observation and research. In particular, teachers need to be able to conceptualize their practice in theoretical terms, they need to be aware of the issues amenable to research, and they need to have skills in data collection and analysis. These skills can be developed through *action* research projects wherein professional development programs can feed into ~ constant cycle of intervention, monitoring, and modification to classroom practices.

Action research refers to teacher-initiated classroom investigation which seeks to increase the teacher's understanding of classroom teaching and learning, and bring about changes in classroom practices (Kemmis and McTaggart, 1982). The linking of the terms 'action' and 'research' highlights the essential feature of the method: trying out ideas in practice as a means of improvement and as a means of increasing knowledge about the curriculum, teaching and learning. The result is improvement in what happens in the classroom and school, and better articulation and justification of the educational rationale of what goes on. Action research "provides a way of working which links theory and practice into the one whole: ideas-m-action" (Kemmis & McTaggert, 1982, p. 5). Cohen and Manion (1980) draw a distinction between applied research and action research. They suggest that applied research is more rigorous and does not claim to contribute directly to the solution of problems. Action research, on the other hand, is less interested in obtaining generalizable scientific knowledge than knowledge for a particular situation or purpose. Action research is *situational,* or context ased *collaborative, participatory,* and *self-evaluative.* Thus, one can safely argue that for teachers who regard conventional research as not for them, action research can be attractive for two reasons:

1) It can have a specific and immediate outcome which can be directly related to practice in the teacher's own context.

2) The "findings" of such research might be primarily specific, and therefore the methods might be more free-ranging than those of conventional research.

Cohen and Manion (1980, p. 112) suggest that action research can be utilized towards five general ends. It can be used as a means of:

1. remedying problems diagnosed in specific situations or of improving in some way a given set of circumstances;

2. inservice training, providing teachers with new skills and methods and heightening self-awareness;

3. injecting additional or innovative approaches to teaching and learning into a system which normally inhibits innovation and change;

4. improving the normally poor communications between the practicing teacher and academic researcher;

5. providing an alternative to the more subjective, impressionistic approach to problem solving in the classroom.

Im particularly interested here with the second of these outcomes, that is, with the potential of action research to contribute to professional development, particularly in encouraging self-directed teachers, who are capable, through action research, of furthering their own professional self-development.

Action research typically involves small-scale investigative projects in the teacher's own classroom, and consists of a number of phases which often recur in cycles: Planning, Action, Observation, Reflection. For example, the teacher (or a group of teachers):

a) selects an issue or concern to examine in more detail (e.g., the teacher's use of questions), b) Selects a suitable procedure for collecting information about the topic (e.g., recording classroom lessons), c) collects the information, analyzes it, and decides what changes might be necessary, d) develops an action plan to help bring about the change in classroom behavior (e.g., develops a plan to reduce the frequency of using convergent questions as opposed to divergent questions), e) observes the effects of the action plan on teaching behavior (e.g., by recording a lesson and anlyzing the teacher's questioning behavior) and reflects on its significance, e) initiates a second action cycle, if necessary.

The following example illustrates this approach to action research in an English as foreign lanaguage context (EFL):

A Palestinian teacher of English as a foreign language (EFL) wanted to increase the amount of English he was using in the classroom. To do so he first investigated how much he used his native tongue (Arabic) during his teaching and for what proposes he was using it. He checked three tapes recorded at different times over a two-week period and first listened to them just to determine the proportion of English to Arabic he was using. It was about 70% English, 30% Arabic. He then listened to the tapes again to find out the purposes for which he was using Arabic. He found that he was using Arabic for two main purposes: classroom management and giving feedback. He then drew up a plan to reduce the amount of Arabic he was using for these two purposes. He first consulted a guide to the use of English expressions that could be used for classroom management and feedback. He wrote out a set of expressions and strategies on 3" by 5" cards, and put these in a conspicuous place on his table. These served not only to remind him of his plan but also helped him remember some of the expressions he wanted to use. Each day he would place a different card on top of the pile. He then continued recording his lessons and after a few weeks checked his tapes His use of Arabic had declined considerably.

Other examples of action research may include, among other issues, improving students' problem solving skills, improving students' negotiation of meaning and conversation management skills, questioning. eliciting' and feedback techniques, wait time, student-teacher and student-student interaction, amount of direction, student talk time and teacher talk time lesson cohesion, smooth transition, evaluation possibilities, teacher talk, etc.

The notion of the self-directed teacher as classroom researcher is consonant with several other trends in teacher development, namely reflective practitioner (discussed earlier). Such a teacher is one who "knows the art and craft of teaching... The *craft* of teaching relates to the teacher's specific knowledge of the subject matter, knowledge on teaching that subject matter, and knowledge on teaching m general. The art teaching involves the combination of knowledge and experience in the many decisions that teachers make as they interact with learners (Wallace, 1994)

Despite its intuitive appeal, the notion of teacher as researcher is also controversial. Wong (I 995), for example, argues that the role of teacher/researcher is conflict-full. For some researchers, the self is part and parcel of research. According to this view, subjectivity is inevitable but it can be harnessed, or al least understood. Sometimes one is compelled to re-negotiate existing classroom norms expectations and practices for teaching as a way of managing the tension between research and teaching agendas Teachers and students may be forced to understand and participate in different goals, activities, and roles

For example. and to create a context that supports research on students' scientific ideas' Wong's (1995) class had to learn and believe that extended questioning, tentative conjectures, and revised explanations were expected. valued, and productive classroom practices.

In conclusion. I tend to agree with Wong (1995) on one point attempting to do research through, on, or about one's teaching necessarily lands one in a complicated epistemological, practical, and intellectual bog These concerns, however, need to be tempered by the fact that teachers as researchers is an effective mechanism that allows teachers to constantly engage in a cycle of learning, exploring, and learning. Structuring this process as a collaborative activity may have the additional advantage of countering feelings of professional isolation, a problem that is certainly an endemic to the profession.

Learning Outside of School: New Structures and Opportunities

This section takes as its point of departure the notion that professional learning and development for teachers takes place not only inside the school but also outside its boundaries. In addition to support structures inside the school, there is growing evidence that important and potentially powerful organizational arrangements exist outside the school as well . One such powerful form of teacher learning comes from belonging to professional communities that extend beyond classroom and school buildings: a) school/university collaboration engaged in curriculum development, change efforts, or research (also discussed in earlier sections under *liaisons),* b) teacher-to-teacher and school-to-school networks: provide "critical friends" to examine and reflect on teaching and opportunities to share experiences associates with efforts to develop new practices or structures, c) teacher development centers that serve as an effective out-of-school support mechanism to enhance teachers' professional development, d) partnerships with neighborhood-based youth organizations club programs, theater groups, literacy projects, museums, libraries that provide teachers with valuable information about the students' no-academic interests and accomplishments.

These networks, collaboratives, coalitions, and partnerships offer teachers opportunities for professional development that differ in quality and kind from those that have been available inside the school or in traditional professional development programs. Unlike most professional development strategies with their "one size fits all" orientation, networks, coalitions, teacher development centers, and partnerships provide opportunities for teachers to commit themselves to topics that are of intrinsic interest to them or that develop out of their work. This point is important because, although learning about new ideas that affect both the content and the processes of teaching is important, ideas that are unrelated to the organization and context of one's own classroom have a hard time competing with the dailiness of work-even when teachers are excited about and committed to them.

By joining informal groups, teachers can develop stronger voices to represent their perspectives, learn to exercise leadership with their peers, use their firsthand experience to create new possibilities for students through collaborative work, and develop a community of shared understanding that enriches their teaching and provides intellectual and emotional stimulation and satisfaction.

In Palestine attempts at reforming teacher education and at providing teachers with both in-school and out-of-school support structures are embryonic and scattered rather than systemic. However. the possibilities for rethinking teacher preparation are probably greater now than they have ever been. An example of such an out-of-school support structure in Palestine is Al-Mawrid Teacher Development Center, located in Ramallah.

AL-Mawrid Teacher Development Center began its activities in 1992. As a mechanism for teacher professional development, the Center's activities aim at meeting the following objectives:

1. Exchanging of knowledge and expertise among teachers.
2. Developing and enhancing interaction between teachers on the one hand, and individuals and institutions whose interests and goals are consonant with those of the center, on the other.
3. Gathering and disseminating knowledge that relates to school subject matters and innovative approaches for delivering instruction.
4. Developing supplementary materials that assist the teacher in making learning more meaningful (reference books' booklets lab. equipment. audio-visual aids, etc).
5 Encouraging teachers. to carry out action and conventional/empirical research.
6. Responding to the special needs of groups of learners.
7. Articulating principles for school and teacher education reform

Over the years and with the help of local and foreign experts and teams of collaborating teachers' Al-Mawrid carried out various activities such as training courses, discussion groups, workshops, panels, and seminars. These activities resulted in the design, development, and assessment of several educational projects, supplementary materials, and a science teaching magazine.

Participants in Al-Mawrid's educational and professional activities have an opportunity to experience shared leadership roles. Garmston and Wellman (1995) note that in this era of change and reform, leadership is shared all the players must have the knowledge and skill to manage themselves,, manage or lead other adults. Leadership is a shared function in meetings in staff development activities in action research, and in classrooms. Recognizing the hats and knowing when and how to change them is important in any partnership, collaborative, or team. Garmston and Wellman (1995) go on to offer definitions that illustrate the major functions of four leadership roles and the distinction among those roles.

1. Facilitator To facilitate means to make easier. A facilitator is one who conducts a meeting in which the purpose is shared decision making, planning, or problem solving: The facilitator directs the processes to be used in the meeting. and choreographs the energy within the group, maintaining a focus on one content and one process at a time. The facilitator should never be the person of positional power.

2. Presenter The role of presenter is most closely associated with staff development work. How content matter is presented often determines whether or not participants will internalize and act upon the content. An effective presentation requires clarity about outcome interactive teaching strategies, and methods to assess the learning that has occurred (Garmston and Wellman, 1992).

3. Coach: Coaches mediate the development of invisible skills: cognitive operations and states of mind. Coaches are non-judgmental employ skills of reflective questioning and inquiry, and help others direct the consciousness to the most useful stimuli.

4. Consultant A consultant can be an information specialist or an advocate for content or process. As an information specialist the consultant delivers technical knowledge to another person or group. As a content advocate, the consultant encourages the other party to use a certain instructional strategy or adopt a particular curriculum As a process advocate, the consultant attempts to influence the client's methodology.

In conclusion. the collaborative efforts listed above are examples of the kinds of networks and partnerships created to deal with complex educational problems that defy simplistic solutions. By bringing groups of teachers together whether to work on particular subject area, to articulate principles for reforming schools. to acquire new pedagogical techniques or to change teacher education programs at universities and schools these networks provide access to new ideas and a supportive community in which to begin translating these ideas into meaningful action in schools and classrooms. In the process teachers help to build an agenda that is sensitive to their contexts and concerns.

Interdisciplinary Collaboration in Teacher Education

For new collaborative models to emerge and spread teacher education programs like schools must restructure in order to engage teacher candidates in interdisciplinary exploration collaborative endeavors and university- and school-based field work opportunities early in their career preparation. This according to Kaufman and Brooks (1996) is the premise that underlies collaborative approaches.

For preservice teacher training the collaborative initiative can contribute to teacher candidates professional growth as teachers. In particular. it provides them with a valuable hands-on experience early in their training. It enables them to make direct correlation between the theoretical work in the class and the real life experience in the field. It also requires teachers to constantly rework and modify their techniques to achieve maximum positive results. Many may also gain the notion that what they learn in the class is only a guideline and that in the field they have to be flexible.

Little documentation exists about innovative ventures within teacher education programs that are designed to prepare teachers for interdisciplinary collaboration and integration of subject matter (e.g.. language and content) In Palestine. some teacher education programs are beginning to foster in beginning teachers of all disciplines new images of collaboration involvement and inquiry images of classroom environments where students of different cognitive abilities needs and interests engage in interdisciplinary activities and construct knowledge rooted in their own personal experiences. At Birzeit

University, for example collaborative initiatives at both the undergraduate and the graduate levels of teacher education are being instituted and encouraged. Students from different disciplines mainly EFL mathematics. sciences and school administration engage in discussion groups about instructional practices new and innovative approaches to teaching - questioning techniques fostering problem-solving abilities cooperative learning integrated curriculum. Some in addition carry out joint projects aimed at the design. implementation and assessment of innovative curricula. These discussion groups and collaborative projects are carried out as part of course work in educational psychology curriculum design and general teaching methodology.

This type of collaboration at the level of teacher education program is the first step toward re-evaluation nd e-organization f existing teacher programs. This is based on the premise that if teachers are to collaborate in schools and create interdisciplinary classroom environments that better foster students" academic growth, they must experience such pedagogy in teacher education programs at the university (Kaufman and Brooks, 1996).

The long-term impact of the interdisciplinary collaboration on teacher candidates' performance as teachers and on the academic achievements of their prospective students is as yet unknown. What is clear, however, is that the experience has engaged all participants as learners in a collaborative community in which the roles of teachers and learners have become indistinguishable.

Professional Development Schools (PDSs)

Some reform models of teacher education in the US--such as those proposed by the Holmes Group, the Carnegie Forum, and the National Board for Professional Teaching Standards- call for all prospective teachers to do their student teaching and a more intensive internship in a PDS prepares them for what schools must *become,* not only schools as they *are.*

Professional development schools prepare beginning teachers in settings that support state-of-the-art practice and provide needed coaching and collaboration. Teacher education reformers are beginning to recognize that prospective teachers. like their students, learn by doing and that a PDS is the right place for implementing these principles. PDSs create settings in which novices enter professional practice by working with expert practitioners while veteran teachers renew their own professional development as they assume roles as mentors, university adjuncts, and teacher leaders In addition, and as teacher educators. beginning teachers, and experienced teachers work together on real problems of practice in learner-centered settings, they can begin to develop a collective knowledge base and common set of understanding about practice. They will also have an appreciation for the fact that learning about teaching is a lifelong process. On their part, Darling-Hammond (1996) and Liberman (1995) argue that professional development schools also provide serious venues for developing teaching knowledge by enabling practice-based and practice-sensitive research to be carried out collaboratively by teachers, teacher educators and researchers. However, one can argue that sustaining these attitudes, roles, and practices in the classroom will require other structures and supports, both outside and inside school

For teacher education reform to become a reality, the concept of the PDS will have to become part of the licensing structure for entry into teaching and be taken into account in the accreditation of teacher education institutes

Education's Mission in the 1990s and Into the 21st Century Education is multidimensional and currently some of its aspects are undergoing shifts.. Aims and objectives that were once well defined are changing. Darling-Hammond (1996) suggests that these aims and objectives, a radical departure from education's mission during the past century, demand that teachers understand learners and their learning as deeply as they comprehend their subjects, and that schools structure themselves to support deeper forms of learning than they currently permit. The invention of 2 I 1st century schools that can educate all learners rests, first and foremost, upon the development of a highly qualified and committed teaching force.

Betting on teaching as a key strategy for education reform calls for starting with reforming our traditional concepts of teacher education and professional development. The changed curriculum and pedagogy of professional development will require new capacity-building policies that foster new structures and institutional arrangements for teachers' learning. Unlike previous reform that amounted to fine-tuning a model teacher. innovative and lasting reform requires investing in stronger preparation and professional development and in creating a climate for local educators and community members to craft their own improvement strategies. This means spending more on teacher development and less on special programs created to address problems created by poor teaching. Finally, we must grant teachers greater autonomy and put greater knowledge directly in their hands and ''seek accountability that will focus on 'doing the right things)' rather than "doing things right" (Darling-Hammond, 1996, p. 6).

Staff development in an era of reform must not be offered as "here is stuff that has been researched so use it" Rather, it should be an invitation to new inquiries. Consequently, the content of staff development - curriculum and instruction should be organized so that as new practices are identified and tried, the faculty can immediately and systematically study their effects (Joyce & Calhoun, 1995).

As opportunities increase for professional learning that moves away from the traditional inservice training, mode-direct teaching and toward long-term, continuous learning in the context of school and classroom and with the support of colleagues, the idea of professional development takes on even greater importance If teacher learning takes place within the context of professional communities that are nurtured and developed both within and outside the school, and that provide opportunities to pursue change through reflective dialogue rather than simply following mandated change in a top-down fashion, then the effects may be more than just an expanded conceptions of teacher development. Indeed, such teacher learning can bang about significant and lasting school change (Liberman, 1995; Peterson et al., 1996).

References

Brubacher, J. (1994). *Becoming a reflective educator. How to build a culture of inquiry in the schools.* Thousand Oaks, CA: Crown Press.

Cohen L., & Manion, L. (1980). *Research methods in education.* London: Croom Helm.

Cruickshank, D. and Applegate, J. (1981). Reflective teaching as a strategy for teacher growth. *Educational Leadership 38, 553-4.*

Darling-Hammond, L (1996). The quiet revolution: Rethinking teacher development. *Educational Leadership, 53(6), 4-11.*

Darling-Hammond, L. (1996). The right to learn and advancement of teaching: research, policy, and practice for democratic education. *Educational Researcher? 25(6),* 5-17

Darling-Hammond, L. and M. McLaughlin. (1995). Policies that support professional development in an era of reform. *Phi Delta Kappan,* 597-604.

Elmore, R.~1995) Structural Reform and Educational Practice, *Educational Researcher, 24(9), 23-26*

Elmore. R & Associates. (Eds.) (1990). *Restructuring schools.* San Francisco: Jossey-Bass.

Garmston' R., & B. Wellman. (1992*). How to make presentations that teach and transform*

Alexandria, VA. ASCD.

Holmes Group, The ~ 1990) *Tomorrow's schools.* East Lansing, MI.: Author.

Jones ~ G . & Vesilind, E. < 1996). Putting practice into theory Changes in the organization of preservice teachers' pedagogical knowledge. *American Educational Research Journal, '33(1), 91- -17*

Joyce, B & Calhoun, E. 1995. School Renewal: An Inquiry, Not a Formula. *Educational Leadership,* 52(7) .5 1-55

Kaufman, D. and Brooks, J. (1996). Interdisciplinary collaboration in teacher education: A constructivist approach. *TESOL Quarterly,* 30(2), 231-351.

Kemmis, S & McTaggert. R (1982). *The action research planner* Victoria, Australia: Deakin University Press

Liberman A. (1995). Practices that support teacher development. *Phi Delta Kappan,* 591-596.

McLaughlin, M. & Talbert. E. (1993). New visions in teaching. In Cohen, D., & E. Talbert (Eds.), *Teaching for understanding. Challenges for policy and practice.* San Francisco: Jossey-Bass

Richards' J & Lockhart, C (1995). *Reflective Teaching in the Second Language Classroom. NY* Cambridge University Press.

Peterson' P. McCarthy S. & Elmore, R. (1996). Learning from school restructuring. *American E Educational Research Journal,* 33 (1), 1 19-15 3

Sarason, S. (1990). *The predictable failure of school reform: Can we change course before it's too fate ?* San Francisco: Jossey-Bass..

Schon. D < 1983) The *reflective practitioner. How professionals think in action.* London. Temple.

Schon, D. (1987) *Educating the reflective practitioner: Toward a new design for teaching and learning in the profession.* San Francisco: Jossey Bass.

Wallace, R. ~ (1994).). *Training foreign language teachers:A reflective approach,* 2nd. edition. Cambridge Cambridge University Press.

Wong, D. 1995. Challenges confronting the researcher/teacher: Conflicts of purpose and conduct. *Educational Researcher,* 24(3), 22-28.

Zeichner, K (1981-2). Reflective teaching and field-based experience in teacher education. *Interchange* 12, 1-22

LITERACY IN CONFLICT: ETHNICITY OR NATIONALISM?

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Three elements of literacy relate directly to a nation-state's ongoing success personal literacy, ethnic group literacy, and national literacy. In each case, improved literacy leads to greater influence.

A literate person can with understanding both *read and write* a short, *simple* statement on his everyday life, . " (Wagner, 1990:118). How a person views himself or herself, the emic view (Andrews, 1989:19), *can be* crucial to a sense of self-worth. An individual's "ability to read or write within the context of his or her society" (Wagner, 1990:122) improves such an emic perspective.

Language, either by itself or in combination with tribe tribal: organization or religion, provides a major opportunity for a group to sustain its identity (Andrews, 1989: 21). In multilingual societies, ethnographers find " complex patterning of literates, partial literates, and nonliterates across languages, ethnic groups, and social classes" (Wagner, 1983:6). In rural Morocco, for example, Berbers think that "some literacy" is "needed by some individuals in every family (or extended family)," but not by everyone (Wagner, 1990: 116).

The etic view, expressed by people outside a group, can be influenced by a nation-state's literacy rate. Daniel Wagner encourages us to regard "all literary abilities and literacies"' as "human and national resources" (Wagner, 1990:115).

Literary measures have been included as key elements in two comparative indexes. The Overseas Development Council includes literacy among three measures for its Physical Quality of Life Index (PQLI). The UN Development Program (UNDP) incorporates literacy in its Human Development Index (HDI). At the national level, literacy is "charged with emotional and political meaning" (Wagner, 1983:5).

In this paper, I look at literacy in conflict from the standpoint of national language selection, employing four brief case studies. In my first two case studies, I focus on ethnicity in the Levant and in South Asia. I ask how minority languages fare against majority languages in Turkey and Sri Lanka. My other two case studies treat nationalism in the Mediterranean and in North Africa. I ask whether local languages prevailed over colonial languages after independence. My conclusion provides suggestions for accommodation of diversity in multilingual societies.

Ethnicity: Minority Languages vs. Majority Languages Turkey: Kurdish vs. Turkish

To promote national unity, the government of Turkey educates its children to speak Turkish. With a total of 47 ethnic groups (Andrews, 1989:8), such a monolingual policy appears rational.

Three of Turkey's ethnic groups (Sunni Kurds, Alevi Kurds, and Yezidi Kurds) are Kurds. Groups of Kurds can be found also in the neighboring countries of Syria, Iraq, and Iran. These other three countries have chosen Arabic or Farsi as their national languages. In each country, use of Kurdish, or Kirmanji, is discouraged.

During the 1960s, the Turkish government allowed some Kurdish publications to appear. Moves were even made towards academic study of Kurds and their language (Andrews, 1989:114). More recently, prohibition of official use of Kurdish, including publications and recordings, "appears to indicate an etic recognition of its importance for group identity, albeit negatively" (Andrews, 1989:113). Some disenchanted Kurds in remoter areas "have in some cases refrained from teaching their children Turkish" (Andrews, 1989:114).

Kurdish Alevis in Tuncel "see manifold connections with the continuing ban on their language." Since Turkey opened up the area, "its economic and cultural development have remained curtailed... (L)anguage has become a political symbol" (Andrews, 1989:518)

Sri Lanka: Tamil vs Sinhala

Sri Lanka is an island south of India. As an English-speaking British colony for 152 years, it was called Ceylon.

Not long after independence in 1948, Ceylon's government in Colombo chose Sinhala as the national language. The vast majority of Ceylonese people, 74%, consist of ethnic Sinhalese. In contrast, Tamils comprise 18% of the population. `Most Moors, another 7% of the population, also speak Tamil.

Ethnic groupings identify religious tendencies in Sri Lanka. Most Sinhalese are Buddhist, most Tamils are Hindus, and most Moors are Muslim. Linguistic exclusivity, therefore, has inherent implications of religious and cultural discrimination,

Official Language Act NO.33 of 1956 introduced "Sinhala only. legislation, making "the end of the political control exercised by the Westernized, English-speaking elite..." This act "symbolized the end of *foreign* domination of Sri Lanka" (Manogaran, 1987:45).

Tamil leaders thought that "they were reduced to 'second-class citizens' when the government failed to recognize Tamil as a regional language" (Manogaran, 1987: 51-52). As "aliens in their own land," Tamils sought federalism as "the only solution to the ethnic problem". They could "become the Switzerland of the East--by following the middle path of negotiation, conciliation, and goodwill--or the Lebanon of South Asia. . " (Manogaran, 1987:150-151).

Dennis Austin noted that "the crudity of majority rule could not have been more starkly demonstrated." Rather than seeking balance, the government opted for "domination, a linguistic monopoly which led inexorably to ethnic and political violence" (Austin, 1995:82). Even though the 1971 constitution declared Tail and English to be national languages, Sinhala was the official language (Australian Centre for Sri Lankan Unity, 1996).

School classrooms have highlighted the dilemma for students who do not speak Sinhala at home. Brian Senewiratne has noted that a child reading government texts "will be unaware that there are ethnic groups in the country other than Sinhalese Buddhists" (Senewiratne, 1989: 43).

In the 1950s, privately-published textbooks for Tamil children "fostered . . . a special feeling for . . . community and language and helped strengthen communal attitudes" (Siriwardena, 1984:222). Once the state took over text publication, Tamil readers embraced a sense of common nationhood[1], whereas Sinhala readers were monocultural, specifically Sinhala Buddhist. "The New Year is simply the Sinhala New Year. . ." Such a monocultural approach continues in higher grades (Siriwardena, 1984: 223-224). A member of the Committee for Rational Development asked poignantly "Why must a

810

sense of common nationhood be taught only to Tamil children, and why must Sinhala children be infected with a conviction of Sinhala-Buddhist dominance?" (Siriwardena, 1984:225).

Exclusion

In response to their sense of inclusion, many Tamils appeared to abandon federalism as a goal.[2] Instead, they sought "to create their own sovereign state of Eelam. . ." (Pannambalam, 1989:57). The World Federation of Tamils held its first International Tamil Conference in London during 1988. Delegates from Sri Lanka and abroad endorsed the liberation Tigers of *Tamil Eelam (LTTE)* because they had "been denied their right of self-determination" (Iyer, 1989: 5).

The Sinhala vs. Tamil controversy notwithstanding, English-speaking bilinguals have dominated Sri Lanka's professions and its social hierarchy (Canagarajah, 1993: 604). All students at the University of Jaffna, for example, must develop English language competence. To do so, they use texts based on standard U.S. English (Canagarajah, 1993:607-608).

My brief case studies of Turkey and Sri Lanka show how majority national languages can suppress minority ethnic groups. Without some opportunity for expression, such groups could resort to violence against regimes holding power.

Nationalism: Local Languages vs. Colonial Languages Malta: Maltese vs. English

The Mediterranean islands of Malta and Gozo lie between southern Italy and Tunisia. Their history extends back thousands of years to times when the people worshipped goddesses.

A Maltese language emerged that can be seen yet today on postage stamps and currency as well as in literature, two daily newspapers, a national television station, and many radio stations. Even so, Malta has "no text dealing with teaching of Maltese to adults" (Mayo, 1994:35).

After the British took control of Malta, they set up evening schools in promotion of English in order to supplant Italian. English remains "the dominant language in the Maltese educational system" (Mayo, 1994:34). The ministate has a resource center for teaching English. Malta's Nationalist Party has revived an adult literacy program taught in English.

While maintaining its local language for use in early primary grades and in the home, the people have accepted that their colonial language "turned out to be an important 'asset'" (Mayo, 1994:34). Malta enhances its possibilities for tourism and investment by promoting its colonial language, English, as its nationalist language.

Morocco: Arabic vs. French

Even though use of the colonial language, French, remains widespread in its urban areas, Morocco has opted for a policy of Arabization. As Morocco's language of literacy, Standard Arabic is the governmentally-sponsored language in primary school and in adult literacy centers.

Morocco, located in the northwest corner of Africa, is a multilingual society. Three language "systems-Arabic, Berber, and French--coexist. Although Moroccan Arabic is the predominant spoken language, "Standard Arabic is the official language of government, schooling, and literacy. . ." (Wagner, 1993:22). Berber, spoken by at least

30% of the people, "has not been authorized at any level" (Wagner, 1993:18). French remains "a secondary official language" (Wagner, 1993:22).

In its use of Standard Arabic to promote primary school literacy, Morocco must confront the prevalence of grade repetition. The Morocco Literacy Project, a five-year longitudinal study, began with 166 students. Five years later, 117 students remained, but only 40% of those students were in fifth grade (Wagner, Spratt, & Ezzaki, 1989:46). Often, it takes almost nine years to produce a fifth-grade graduate (Wagner, 1993:242).[3]

The French language is introduced as a second language in third grade. French texts focus on modern life and a person's environment, in contrast with Arabic texts, which emphasize heritage and values (Ezzaki, 1993: 143). Even though it was the colonial lingua Franca, French has become Morocco's elitist language. After children of a visiting American professor were admitted *to a French laycée*, their mother noted that "we had attained a degree of respectability in spite of ourselves" (Fernea, 1976:77).

Evidence of Morocco's fortuitous compromise between a local language (Arabic) and a colonial language (French) can be seen in postsecondary education, where French is the medium of education (Ezzaki, 1993:143). Morocco's government in Rabat is "trying to maintain French as the language for the modern economy"--" the window on the world" (Wagner, 1993:23).

Involving itself increasingly in world trade, Morocco has established an English-language university in Ifrane. The campus, Al Akhawayn University, was funded initially by a generous grant from the Kingdom of Saudi Arabia. The university has "modeled . . its administrative, pedagogical and academic organization on the American university system" (Al Akhawayn, 1996:12).

My brief case studies of Malta and Morocco acknowledge the importance of language for nationalism, but in very different ways. Malta chooses to maintain its local language for symbolic purposes, but employs the colonial language to promote its nationalist identity. Conversely, Morocco has adopted a major local language for nationalist purposes, while retaining the colonial language for most of its universities.

Accommodation of Diversity

I will conclude by addressing two elements of diversity: environmental and linguistic. The environmental approach focuses on challenges faced at home and within communal groups. The linguistic approach addresses challenges posed by bilingual and multilingual settings.

For decades, the Arab world has provided leadership in improving upon language training that began at home. The Arab States Fundamental Education Center (ASFEC) was established to train teachers to develop materials simple in language but of interest to adults (laves & Thomson, 1957:155-156). The Arab Organization to Eradicate Illiteracy, created in 1966, tapped January 8 as Arab Literacy Day (Nimer, 1986:61, 64). A Women's Organization for combatting Illiteracy was established in Amman six years later (Nimer, 1986:236).

Another element of environmental analysis relates to emigration of communal groups. People who were minorities at home, such as Kurds and Berbers, become different minorities when living abroad. One study of immigrants grouped ethnic groups by their nationalities, identifying 185,000 Turks and 143,000 Moroccans in the Netherlands (Verkuyten, 1995:161), without any reference to their native languages. Since they were simply non-Dutch, "ethnic origin" referred to nationality.[4]

Such a global, or etic view, emphasizes national unity in the face of potentially disruptive diversity. The bilingual system that evolved in Tunisia offers a potential solution to countries moving toward one national language. Although Tunisia has opted for Arabization, it has achieved that goal within beginning grades at the primary level. Meanwhile, French dominates instruction at secondary and university levels, although such secondary school subjects as geography, history, and philosophy are "taught largely or exclusively in Arabic' (Perkins, 1986: 122).

While Mayans on Mexico's Yucatan peninsula must study the Spanish language, they are getting a better understanding of how their "ancestors saw the world" by learning Mayan from foreign scholars (Mooney, 1996). As a contrast, how do Sri Lankans preserve ethnic traditions without encouraging secessionist tendencies? "One pre-condition for any effort to build a sense of national identity," writes Reggie Sirwardena, "is the rewriting of schoolbooks." While avoiding racial myths and obsessions with invasions and wars of another age, groups can recognize "common elements" ommitted Linking them " in shared experiences and mutual assimilation of elements from each other's cultures" (Siriwardena, 1984: 226).

Countries facing linguistically-connected turmoil, such as Turkey and Sri Lanka, can convert their multi-lingualisms into strengths. Accommodative solutions by Malta and Morocco exemplify achievable alternatives. Rather than emphasizing nationalisms that excludes minority languages, multilingual societies need to search for ways of responding effectively to their dilemmas Although a nation-state might adopt one national language, its ability to incorporate its other linguistic groups will say a lot about its future harmony.

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Notes

1 One Tamil kindergarten reader said:

"We are Tamils
We are Muslims
We are Sinhalese
ILankai (Lanka) is our land
we are all people of this land
We are friends.

The land of ILanhai is our land
It is our sweet mother land.' (Siriwardena, 1984:223)

2. Even so, LTTE leader V. Prabakaran said on a BBC broadcast in 1993 that "the LTTE would consider a federal scheme" (Pfaffenberger, 1994:12).

3. One study of Moroccan primary school leavers concludes "that Third World countries like Morocco have undertaken a reasonable policy of educational universalization if one goal is instilling 'permanent' (though low-level) literary skills in children. . . ." (Wagner, Spratt, Klein, & Essaki, 1989:313).

4. A study of immigrants in Belgium yielded similar results. An anthropologist involved in observing female Turkish students commented that "only vis-a-vis non-Turkish outsiders is a national Turkish identity displayed. Internal ethnic divisions are not relevant in facing aliens" (Timmerman, 1995:23).

5. One (Sri) Lankan writes well on nationalist dangers. "Nationalism creates a sense of an exclusive community with collective interests and values. Where the exclusive community does not embrace all groups in a polity, it propels the creation of alternative nationalisms, leading to a process of balkanization and self-determination" (Coomeraswamy, 1984:191).

References

Al Akhawayn (1996) .
Al AkhawaYn University in Ifrane: 1996-1997 catalog.

Andrews, Peter Alford (1989) . Ethnic Groups in the Republic of Turkey. Wiesbaden: Dr. Ludwig Reichert Verlag.

Austin, Dennis (1995) . Democracy and Violence in India and Sri Lanka. New York: Council on Foreign Relations Press.

Australian Centre for Sri Lankan Unity (1996) . The Myth of Discrimination Against Tamils in Sri Lanka . Toowong, Queensland: Australian Centre f or Sri Lankan Unity .

Canagarajah, A. Suresh (1993) "Critical Ethnography of a Sri Lankan Classroom: Ambiguities in Student Opposition to Reproduction Through ESOL.. " TESOL Quarterly 27, no.4 (winter): 60 1 -626 .

Committee for Rational Development [Ed.] ((1984) . Sri Lanka The Ethnic Conflict: Myths, Realities & Perspectives. New Delhi: Navrang. Coomaraswamy Radhika (1984) .

"'Through the Looking Glass Darkly': The Politics of Ethnicity. " Pp. 174-196 in Committee for Rational Development [Ed.], Sri Lanka The Ethnic Conflict: Myths, Realities & Perspectives . New Delhi: Navrang.

Ezzaki, Abdelkader (1993) . " A Changing Literacy in Morocco: A Contextual and Pedagogical Overview. " Journal of Reading 37, no. 2 (October): 142-145 .

Fernea, Elizabeth Warnock (1976) . A Street in Marrakech: A Personal View of Urban Women in Morocco. Press .Prospects Heights, IL: wave land pess.

Iyer, Justice V. R. Krishna (1989) . "Inaugural Address. " Pp. 3-10 in N. Seevaratnam [*Ed.]* The Tamil National Question and the Indo-Sri Lanka Accord. Delhi: Konark Publishers.

Laves Walter H. C. & Thomson, Charles A . (1957) . UNESCO: Purpose, Progress, Prospects . Bloomington: Indiana University Press.

Manogaran, Chelvadurai (1987). Ethnic Conflict and Reconciliation in Sri Lanka. Honolulu: University of Hawaii Press.

& Pfaffenberger, Bryan [Eds.] (1994). The Sri Lankan Tamils: Ethnicity and Identity. Boulder: Westview Press.

Mayo, Peter (1994). "State Sponsored Adult Literacy Programmes inMalta: A Critical Review." Language and Education 8, nos.1 & 2:31-39.

Mooney, Carolyn (1996). "A Culture in Code: Teaching the Modern Maya to Decipher Their Ancestors' Hieroglyphics." The Chronicle of Higher Education 43, no.13 (Nov.22):B2.

Nimer, Kamal K. (1986). The Role of Women's Organizations in Eradicating Illiteracy in Jordan. Washington, DC: ABBE Publishers Association.

Pannambalam, Justice Satchi (1989). " The Right of the Tamil Nation to self-Determination." Pp.54-57 in N. Seevaratnam [Ed.], The Tamil National Question and the Indo-Sri Lanka Accord. Delhi: Konark Publishers.

Perkins, Kenneth J. (1986). Tunisia: Crossroads of the Islamic and European Worlds. Boulder, CO: Westview Press.

Pfaffenberger, Bryan (1994). "Introduction: The Sri Lankan Tamils." Pp.1-27 in Chelvadurai Manogaran & Bryan Pfaffenberger [Eds.], The Sri Lankan Tamils: Ethnicity and Identity Boulder: Westview Press.

Roosens, Eugeen [Ed.] (1995). "Rethinking Culture, Multicultural Society' and the School." International Journal of Educational Research 23, no.1:1-105.

Schieffelin, Bambi B. & Gilmore, Perry [Eds.] (1986). The Acquisition of Literacy: Ethnographic Perspectives. Norwood, NJ: Ablex Publishing Corp.

Seevaratnam, N. [Ed.] (1989). The Tamil National Question and the Indo-Sri Lanka Accord. Delhi Konark Publishers.

Senewiratne, Brian (1989). "An Evaluation of Solutions to the Sri Lankan Ethnic Conflict and Sinhala-Buddhist Chauvinism and the Buddhist Clergy." Pp.27-44 in N.

Seevaratnam [Ed.], The Tamil National Question and the Indo-Sri Lanka Accord. Delhi: Konark Publishers.

Siriwardena, Reggie (1984). "National Identity in Sri Lanka: Problems in Communication and Education." Pp.215-229 in Committee for Rational Development [Ed.], Sri Lanka The Ethnic Conflict: Myths, Realities & Perspectives. New Delhi: Navrang.

Timmerman, Chris (1995). "Cultural Practices and Ethnicity: Diversifications Among Turkish Young Women." International Journal of Educational Research 23, no.1:23-32.

Verkuyten, Maykel (1995). "Self-Esteem, self-concept Stability, and Aspects of Ethnic Identity Among Minority and Majority Youth in the Netherlands.' Journal of Youth and Adolescence 24, no.2:155-175.

Wagner, Daniel A. (1983). "Ethno-graphies: an introduction." International Journal of the Sociology of Language 42:5-8.

________ (1990) . "Literacy Assessment in the Third World: An Overview and Proposed Schema for Survey Use." Comparative Education Review 34, no.1 (February):112-138.

________(1993). literacy, Culture, and Development: Becoming Literate in Morocco. New York: Cambridge University Press.

________ Messick, Brinkley M., & Spratt, Jennifer (1986). "Studying Literacy in Morocco." Pp.233-260 in Bambi B. Schiefellin & Perry Gilmore [Eds.], The Acquisition of Literacy: Ethnographic Perspectives. Norwood, NJ: Ablex Publishing Corp.

_______ Spratt, Jennifer E., & Ezzaki, Abdelkader (1989). "Does learning to read in a second language always put the child at a disadvantage? Some counterevidence from Morocco. Applied Psycholinguistics 10, no.1:31-48.

_______ Klein, Gary D., & (1989). "The Myth of literacy Relapse: Literacy Retention Among Moroccan Primary School Leavers." International Journal of Educational Development 9, no.4:307-315. Essaki, Abdelkader.

TEACHER EDUCATION & SCHOOL REFORM IN JORDAN

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School reform

The contemporary education system has developed into comprehensive, coherent, unified system embracing both formal and nonformal education. The formal education system comprises pre-school, compulsory, secondary and post-secondary (tertiary or higher) education cycles. Nonformal education encompasses adult literacy programs; government, private and voluntary sector business and vocational short-term training programs; and inservice training. Special education services are provided by the Ministry of Social Development and voluntary sector.

Signs of Weakness of the education system that needed urgent attention before the reform

1. Emphasis on rote learning.
2. Stress on factual knowledge not on critical thinking.
3. Outdated curricula and textbooks.
4. Irrelevance to current development conditions.
5. Dislike vocational technical education.
6. Poorly trained teachers and underqualified principals.
7. Lack of educational facilities in schools.
8. Inadequate supervision.
9. Bureaucratic administration and management system.
10. Large number of very small schools.
11. Large number of schools with staggered grade structure.

Education reform unfolded as a two year process of critical review and assessment between 1985 and 1987. The reform process commenced with the Prime Minister establishing a comprehensive study of the education system that was submitted to the government one year later. The report was discussed in 17 Board of Education sessions chaired by the Crown Prince. During these months of discussion, Crown Prince Hassan made regular field visits to schools to gain grassroots insights. At the conclusion of the 17 sessions, the BOE decided that further study was needed to address key issues. A Central Task Force, representing the public and private sectors, was instituted and supported by the work of specialized expert and local field committees. A Follow-Up committee was then tasked with integrating these various components into major thematic reports. Each report was discussed in a seminar, chaired by the Crown Prince and attended by the Prime Minister and Minister of Education, consisting of 50-60 experts particular to the theme and variously representative of the social and economic sectors. The seminar proceeding were recorded for documentation purposes at the television studio. In total thirty-five hours of tapes representing the collective thinking of various groups at this point in time are available for use researchers and scholars.

The two years assessment process culminated in the first *National Conference on Educational Development;* September 6-7, 1987. The Conference was sponsored by His

Majesty King Hussein who also provided the opening address. The King's address, since considered a foundation for education policy, stressed four major themes:

- *Quality and equilibrium between natural resources and population for sustained national development;*
- *A balanced approach to preservation of national heritage and openness to world cultures;*
- *Accommodation of the needs and challenges of the modern times;*
- *Faith in God and spiritual values, dignity of work.*

The Conference established the basic principles for Educational Reform Plan (ERP) to be implemented in seven phases over ten years (1989-1998). Key reforms included: (a) extending the compulsory education cycle from nine to ten years and reducing the secondary cycle from three to two years; (b) developing preschool education; (c) institutionalizing processes for review and revision of curricula; (d) increasing the proportion of secondary vocational examination systems; (f) raising minimal teaching qualifications from a community college diploma to a first degree; (g) upgrading instructional skills and competencies; (h) upgrading the qualifications of school administrators; (I) improving school facilities; (j) providing instructional support facilities; (k) establishing systems to monitor student progress and achievement; and, (l) expanding post-secondary education by relaxing the ban on private universities.

Reform strategies

A. Policy measures

To achieve the fundamental reform objective of enhancing student achievement levels, the plan involves implementing the following policy measures:

1. Restructuring the school system.
   - Extension of free and compulsory basic education from 9 to 10 years.
   - Providing opportunities for specialization through restructured two-year secondary cycle:
     - Core program for all
     - Specialized options for science, arts and vocational branches.
   - Implementing a new promotion and examination system.

2. Improving the quality of teaching and learning.
   - Curricular reform.
   - Redesigning and developing textbook guides, instructional aids, and supplementary materials.
   - Upgrading minimum qualification requirements for teachers.
   - Improving in-service training of teachers.
   - Upgrading the qualifications of educational supervisors and school principals.
   - Improving the quality of school facilities.
   - Providing teacher support facilities by opening learning resource in different regions.
   - Establishing a system for periodic assessment of student achievement on regular basis.

3. Using sector resources more efficiently.

B. Institutional framework

1. To ensure the reforms would be instituted the National Center for Human Resources Development (NCHRD), formerly known as the National Center for Educational Research and Development (NCERD), was created under the umbrella of the Higher Council for Science and Technology (an autonomous body chaired by Crown Prince Hassan). The primary functions of the NCHRD are to: (a) monitor and evaluate how effectively reform programs and subprojects operate, and how they contribute to the overall reform goals; (b) establish and maintain the Educational Management Information System (EMIS) as an education data base support system; (c) conduct education policy and large scale sectoral research; (d) institutionalize education technologies and innovation; (e) become a medium for education information documentation and dissemination; and, (f) plan for human resources development.

2. Institutionalization of textbooks production publication and distribution.

3. Institutionalization of the process of curriculum development.

4. Institutionalization of in-service training and staff development.

While the ERP is ongoing, several initiatives have been implemented successfully. Facilitated by the 1988 Temporary Education Law (now replaced by the 1994 Education Law) the general education system has been restructured to extend compulsory education to ten years and reduce secondary education to two years; supporting curricula for the new grade structure have been introduced; the examination system (including the General Secondary School Certificate Examination) has been revised; basic cycle texts have been completed; school administrator qualifications have been upgraded; school facilities have been upgraded; new school have been built and equipped; the NCHRD has been established; EMIS has been established; and, several private universities have been opened.

The 1990s and 21st Century

Issues pertaining to the development of education in the 1990s and leading into the 21 st century continue to center on the improvement of quality at all levels of the education system. Additional challenges include the need to accommodate increasing numbers of enrollments and match education supply with labor market demands.
These issues clearly are reflected in GOJ general education sector policies for 1993-1997 which emphasize: (a) *developing and improving* preschool education; *(b) improving* educational quality at the compulsory level and reducing the dropout rate; (c) *developing* comprehensive and applied secondary education to meet the need of students and labor market requirements; (d) *developing* literacy programs; (e) improving the quality and effectiveness of tests and exams; (f) *improving* teacher competence; (g) *providing* teaching aids; (h) constructing and equipping school facilities; and, (I) enhancing educational management capabilities.

Reform of teacher education & training

It consists of three main components:

1. In-service training.
2. Teacher certification.
3. pre-service training.

1. In-service training (short term) which include:
   - Core program.
   - Orientation on reform goals.
   - Orientation on new curricula and textbooks.
   - Pedagogical training in more effective teaching methods.

In this program *stress will be on deepening the qualitative impact of the reform through improving and extending the in-service training program related to the implementation of new curricula to teachers who have not been included in earlier training and enhance teaching competencies; developing the capacity to provide school-based integrated in-service training and quality improvement initiatives; sensitizing teachers to diagnostic approaches and remedial interventions; improving the capacity of trainers, administrators, and principals for administrative and educational leadership.*

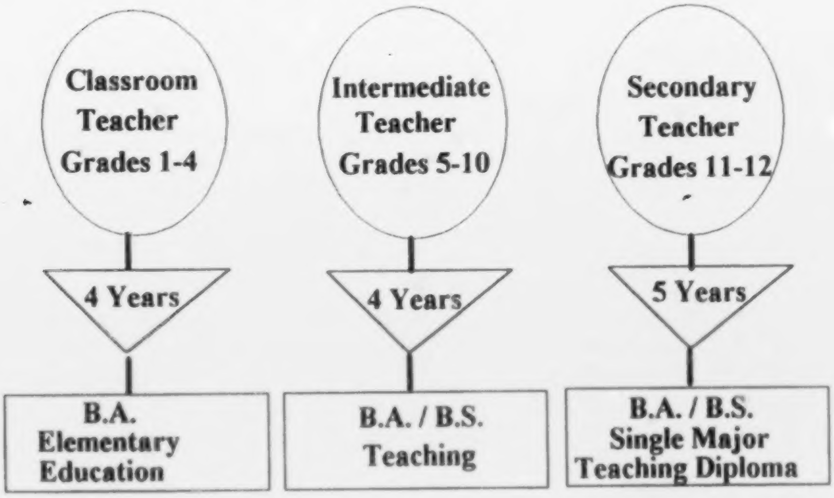
2. Teacher certification program , upgrading the academic qualifications of existing basic and secondary education teachers.
   - Certification of basic education teachers. By far the largest portion of the certification effort would be upgrading the academic qualifications (from 2-year diploma to 4- year university degree) for existing basic education teachers, to be undertaken by three universities (university of Jordan in Amman, Yarmouk university in the north and Mu'tah university in the south).
   - Certification of secondary education teachers and supervisors/ administrators. Upgrading programs are also planned for secondary teachers with BAs but no education diploma, and for supervisors/administrators who are currently without an MA degree. These schemes are smaller than the basic education certification program, but they are critically important because of the pivotal role these target groups play in the education system as a whole.

4. New structure for pre-service training.

Moreover, teacher qualification is classified into three categories as shown in the graph below:

1. Classroom teachers; teachers qualified to teach all school subjects to students of the first four primary classes.
2. Field teachers; teachers qualified to teach more than one specific subject within one discipline to grades five through ten.
3. Subject teachers; teachers qualified to teach a subject to grades eleven and tweleve.

Teacher Qualification Required by Reform


Classroom Teacher Grades 1-4
4 Years
B.A. Elementary Education
Intermediate Teacher Grades 5-10
4 Years
B.A. / B.S. Teaching
Secondary Teacher Grades 11-12
5 Years
B.A. / B.S. Single Major Teaching Diploma

The overall purpose of the project is to improve the quality and relevance of undergraduate pre-service teacher education within Jordanian universities, and to develop their capacity to serve the needs of the national education system. More specifically the project aims to.

a) Support the Government's Educational reform Program (ERP) which aims to improve the quality of school-level education.
b) Improve the relevance, internal efficiency and quality of pre-service teacher education.
c) Develop a capacity and capability for continuing coordination and quality improvement for teacher education.
d) Increase the provision and quality of postgraduate course in educational sciences within the Kingdom and their relevance to Jordanian education system.

To implement those aims two types of programs had been chosen:

1. Education faculty fellowship program.
   This program allowed 45 Education Faculty members from Jordanian Universities to spend 3 months each at selected Teacher Education institutions in the U.S and visit professional development schools, to gain new experiences in the methods of preparation of teachers with special emphasis on Practice Teaching.

2. Increased collaboration between the concerned institutions in the Kingdom and with EC institutions.

The project activities constitute the following three components:

a) Coordination and Management includes:

A management Unit for teacher Training (MUTT) which has a Jordanian Manager at the (NCHRD) National Center for Human Research Development, a Project Coordinator financed by European Community (EC), the four Liaison Officers from (University of Jordan, Yarmouk University, Mu'tah University and Hashemite University), and a project Administrator.

- Activities:
- A steering Committee chaired by the President of NCHRD with membership of representatives from the four Jordanian Universities, the Ministry of Education, the Ministry of Planning, the Vocational Training Corporation and the European Community, in addition to the Project Manager who acts as the Committee's Secretary. The Committee holds its meeting once every six months to revise the progress reports and implementation plans.
- A Management Committee MUTT will monitor and appraise all subprojects under this project, and also a Teacher Training Technical Committee (TTTC) will be formed consisting of the four Liaison Officers, the Project Manager and the Teacher Education Coordinator (TEC). Any assignment of specialists is subject to the approval of the MUTT and the EC Delegation. The approval must be in writing confirming the proposed specialist and the period of assignment.

b) Improving Teacher Education:

This component will prepare staff within each university to qualitatively contribute to pre-service teacher training at universities. It will also support the establishment of a network of teaching practice school at each university. The component includes staff-development opportunities for short attachments, and postgraduate study in Europe.

- Activities:
- Training the trainers:
  The universities will appoint around 50-60 persons of teaching assistants and instructors who will take a major responsibility in the pre-service courses. This group will be trained in how to teach traditional subjects in experiential and practical ways on both national and university levels. Also this component offers 15 fellowships for one month study attachments to European Institutions.
- Review Courses and Establish Formative Evaluation: Specialists will work with Jordanian Universities to produce a detailed course design which indicates the elements of the course. This will also provide equipment, books and other items.
- Establishment of Network of the Teaching Practice-schools: This intended to help each university establish a network of about 20 practice school and to ensure that such schools have basic equipment and consumable resources to permit trainee teacher to use new teaching methods.
- Professional development of core training group:

The project will fund 20 scholarship (6 one-year master fellowship) and (14 three-year Ph.D. fellowship). This will be provided to the four universities according to the following ratio:

University of Jordan	35% of the fellowship
Yarmouk University	35% of the fellowship
Mu'tah University	35% of the fellowship
Hashemite University	35% of the fellowship

The EC will fund 75% of the above mentioned scholarship and the Jordanian universities will be responsible for the remaining 25%. This fellowship will not be launched at the beginning of the project but only after the candidates have been trained in teacher training, English language and computer knowledge and they are to be chosen from the core group members.

c) Institutional Development:

This component will provide inputs to help the universities initiate new programs and activities of strategic relevance for the ERP; these will include new postgraduate programs, including doctoral programs. The component also provides support for visiting sprcialists, for academic links between Jordanian and European institutions and for postgraduate study. Activities under this component will be implemented as '' Sub-projects"

- Activities:
- Programs and research development:

On the basis of separate proposals from the universities, this sub-component will facilitate links to European universities. Inputs will include visits and academic exchanges, books and journals and fellowships for study at European universities (12 Ph.D. and 6 Masters) distributed among the four universities according to the rates mentioned in b) above.

- Management Improvement:

This sub-component provides for faculty managers to attend intensive training courses either locally or at European institutions.

Strategies for core group training

Core group resource persons will require all round skills including:
Academic ability, analytical skills, managerial and administrative skills, pedagogical competence, a very high level commitment, and a positive attitude.
Their training would focus upon developing the following skills:

- Academic skills.
- Pedagogical skills.
- Basic administrative and managerial skills.
- Communication skills.

THE USE OF REFLECTIVE PRACTICE AND PERSONAL NARRATIVES IN THE PROFESSIONAL DEVELOPMENT OF TEACHERS

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This paper addresses the use of reflective practice in supporting the professional development of practicing teachers. There is a significant amount of research and documentation about the value of reflective practice for teachers and other professionals. It is the writer's purpose to share through his own reflection the application of this approach with in-service teachers. More specifically, the teachers in this study are enrolled in a masters degree program in curriculum and instruction and are taking their culminating seminar.

Students have typically been at a loss as to what might be the anticipated nature of a culminating experience. From the faculty members perspective there was a need to pull together the masters degree program to insure that it is a program and not just a series of courses. Research projects, literature reviews, or group inquiry on selected topics never seemed to accomplish the task. The reoccurring question was how can we insure that that teachers have made some behavior change upon completion of a graduate program. It was also important to faculty that teachers would leave the university with skills needed to sustain the professional growth process.

When students were asked what they felt a culminating experience should include they were quick to suggest opportunities to share their experiences with each other, to review and analyze the application of their knowledge in their classroom and to discover ways to continue to grow professionally in the future. Most of the students expressed anxiety that as they left the university they still had many questions, if not concerns, about their teaching, their learners and the contexts in which they teach. What would sustain their professional development? These concerns about their professional identity and how they could continue their professional growth defined the nature of this course. Based on teacher in that process and how can we sustain their growth.

During the teachers' Masters degree program case studies have often been used to assist teachers in considering real situations as they attempted to make connections from theory to practice and vice versa. When planning this course the students suggested the delet idea of considering themselves as the "case" to be studied. They thought this would provide them with an opportunity to gain insight into who they are as teachers; where they are at this point in time in their professional growth; and how they could we continue to grow professionally.

The next concern for the students was how this process of investigation might be accomplished. Everyone agreed that reflection on past experience was the appropriate approach. Most of the teachers had been journaling their way through graduate studies, given the popularity of the approach. Journaling is usually a reflective process but it became important to consider what types of reflection was occurring and what elements were appropriate to the student's goals.

Study of the cognitive, critical, and narrative elements of reflection (Sparks-Langer, Simmons, Pasch, Colton & Starko, 1990) gave students new insight into aspects of the reflective process that most of them had not considered. Teaching is a complex and uncertain activity for all teachers. Teacher educators must allow teachers to construct their own meaning from their practice. The study of the cognitive elements of reflection assist them in looking at the elements of their knowledge base (Shulman, 1987). This is particularly important in reference to teaching contexts and educational purposes, ends, and aims. Another important aspect of the cognitive element for teachers has been the investigation of the organization of the knowledge base. It is the schemata (Anderson, 1984; Berliner, 1986) that is constructed through experience that lends important data worthy of teacher's inquiry. A third area worthy of teacher investigation is their metacognition—self-regulated, purpose-driven behavior. A reflective teacher attends to the effect of an action as well as the cognitive processes employed to make decisions (Sparks-Langer, et al., 1990). Students apply all three aspects of the cognitive element of reflection in the course.

While the cognitive element of reflection emphasizes how teachers make decisions, the critical approach stresses the substance that drives the thinking. This includes the experiences beliefs, sociopolitical values and goals of teachers (Sparks-Langer, et al., 1990). The idea used by critical theorists that knowledge is socially constructed is at he heart of the critical element of reflection. The knowledge is determined by the surrounding culture, context, customs, and historical era (McLaren, 1989).

Cochran-Smith and Lytle (1990), have summarized the importance of the narrative element of reflective activity by saying, "what is missing from the knowledge base of teaching, therefore, are the voices of the teachers themselves, the questions teachers ask, the ways teachers use writing and intentional talk in their work lives, and, the interpretive frames teachers use to understand and improve their own classroom practices" (p.2). It is the teacher's understanding of the context in which decisions are made; that takes their analysis beyond the cognitive and critical elements of reflection. This view is most attentive to Schon's recognition of teacher's voice in describing their behavior.

What has emerged in the process of negotiating the curriculum for the culminating experience with teachers is a conceptual framework that recognizes three groups that are important in the exploration of their concerns. Clearly the graduate student/teachers are the major stakeholders in this process. In addition, the students in the teachers' classrooms also have an impact on the teachers' growth. Finally, the university faculty play an important role as they facilitate the growth of the teachers. It has been important for professors to participate in the same process with their students so they can develop greater sensitivity to what their students are experiencing.

The teachers come filled with experiences, knowledge, analytical skills, ideas, dispositions, communication styles, attitudes, beliefs, values, and lifestyles that make up who they are as a teacher and a person. They have been nurtured in various contexts and exist today in diverse settings.

The teachers in our graduate classes also bring with them the interplay they have with their students. For many teachers the value and eventual transfer to practice of anything taken from a graduate class occurs in part to the extent that it makes an impact on their learners. The current heavy emphasis on student outcomes places pressure on teachers to be sensitive to student achievement when making decisions about integrating knowledge about teaching into their repertoire of skills. The role students play in the professional growth of teachers must be recognized. Professional development can not occur in a vacuum. Teachers receptivity to new ideas is guided by this interaction.

The university faculty are major players in the process of studying the teachers professional development. They facilitate the teachers analysis of who they are as teachers but they also have the opportunity to do the same for themselves. They assess if they have designed an effective learning experience for the teachers and thereby become more informed about their own teaching. This modeling of the reflective process requires an openness to learners and demonstrates to teachers that teaching remains an uncertain activity.

In order to give greater structure to the culminating course in the curriculum and instruction masters degree program a process of study that focuses on reflective practice has been adopted. Reflective practice is explained by Osterman and Kottkamp (1993, p. 19) as a "means by which practitioners can develop a greater level of self-awareness about the nature and impact of their performance, an awareness that creates opportunities for professional growth and development". They further explain that the reflective practitioner faces a complex situation where they are both the actor in the play as well as the critic analyzing the performance. This perspective is best achieved when teachers are able to step back from their roles and analyze their behavior. It is not an easy task. As Schon (1983) has explained, professional knowledge is grounded in professional practice. Teachers and other practitioners usually have a difficult time explaining what leads to successful performance . They also have a difficult time understanding how their own behavior gets in the way of meeting the expectations they prize.

The development of self-awareness is a difficult process. The professor's goal in our graduate class is to use an approach of asking teachers to consider problematic situations (Dewey, 1938). Part of the teacher's growth is the recognition that their experience can be the basis for continued learning. Dewey, Lewin and Piaget have all recognized the importance of reflecting upon experience and proposed that behavioral change results from analysis of experience. This is particularly the case as problematic situations are considered. Consideration of both the process and context results in more valid thinking about problems teachers face. The recent attention to problem-based learning (Bridges, 1992) proposes that learning is best achieved through an active, social and authentic learning process. Learning is best achieved when the learners are actively involved in the learning process, when it takes place collaboratively, and when it is contextually relevant to the learner (Brown, Collins, & Duguid, 1989a, 1 1989b; Prestine & LeGrand, 1991).

As a reflective practitioner the teacher steps aside to analyze a situation that is unsettling. They might ask themselves: What occurred? What observations did others make? What did I intend to happen? The teachers pursue the inquiry process to define the problem, analyze it, redefine it, and try new solutions. This process proves to be successful for only a limited number of students. It is only when teachers are given a framework for considering their actions and decisions that they begin to really define the problems that they face.

The personal action theory model used by Osterman and Kottkamp(1993) provides a workable paradigm for teacher use in analyzing their teaching. Theory has a basis in the daily activity of teachers. They are "the ideas and assumptions we hold about how things should and do work" (p.8). All teachers have action theories about methodology, learning, child development, etc. and Kottkamp suggest two types of personal action theories: espoused theory and theories-in-use. Espoused theories are what we are able to say we think and believe. We are conscious of them and we change them easily as new data and ideas are garnered. The teacher has acquired numerous ideas through intensive study or experience and is able to espouse them. When asked, the teacher is usually able to articulate them. We also know that while it might be our hope that these espoused theories would guide our actions they often do not. New ideas may often not get implemented in practice. We may also behave inconsistently with, or contrary to, our best intentions. This leads to dilemmas, concerns, or what might be referred to as problems for teachers. These problems become the focus of a narrative that teachers write in this course. Osterman's notion of theories-in-use provides the second dimension of the conceptual framework underlying reflective practice (Osterman & Kottkamp, 1993, p.9). These theories contain the assumptions and beliefs that guide our activity. Unlike espoused theory that is conscious and easy to change, theories-in-use are difficult to articulate and hard to change. They develop over time through acculturation to become habitual and are culturally reinforced. Osterman and Kottkamp use the example of " the period playing teacher. as a child, and eventually as a professional (p. 11). Activity that is part of what we associate with the role. We have theories-in-use for leadership, classroom management, as well as all aspects of teaching and living. They may be highly effective or ineffective based on the desired outcome.

A useful approach to getting at one's espoused theory is the use of platform statements. It is a brief statement of what one intends to do, to accomplish, and how (Kottkamp, 1982, 1 990a; Sergiovanni & Starratt, 1983). What is the teacher's beliefs and values about teaching, children, the community, etc.? What assumptions guide their professional practice? In describing her use of platforms with students, Osterman (1993) calls it a "mission statement. in which she asks students to outline their vision or describe their ideal school in terms of learning, instruction, governance, school climate, and school community relations. Platform statements very greatly among teachers. The teachers in the seminar are not required to follow any specific format. The following are a few excerpts from platform statements submitted by students:

Student #1:

. I believe that all children have the potential to learn. As a teacher, I have ~ amoral obligation to provide opportunity for / learning for all children. I believe that motivation is intrinsic and that a child can choose not to learn. I believe that the learning process should be experiential and assessment authentic. I believe classrooms should be student-centered and non-threatening. Instruction should be developmentally appropriate, purposeful and comprehensible to all students.

At this point in my teaching career, I believe that I am morally obligated to guide, nurture and be a role model for young people on the path to adulthood; to ensure that they have the opportunity to acquire the academic and social skills necessary to be successful in their adult lives; to model and nurture acceptance and tolerance of differences and respect for the integrity of each individual. I have an obligation to model and nurture accountability in the classroom and help students discover that all actions hove consequences and our actions ore the result of our individual choices period.

Student # 2:

In the context of my role as a second-language teacher (English and Spanish), my beliefs and practices are being continually challenged, more clearly defined, and steadily strengthened. I recognize that they ore not stagnant— that my experiences with my students and my ongoing studies in education cause me to reflect on what I think I know and to gain new perspectives. In particular, my work with immigrant students has broadened my experience as a professional and as a person. I feel most strongly about three aspects of what I do. They are the things that I struggle with the most and on which I expend the most energy. They are also the things that I believe make the biggest difference in the success of my students. They are affective considerations, cultural awareness, and communication.

Student #3:

I believe that all children are born with a curious nature to explore, categorize, and make sense out of their are environment. However, somewhere along their journey through childhood they lose their sense of adventure and awe because of failure, negative feedback, or lack of encouragement.

I believe that many children can't understand the link between a good education and the fulfillment of their dreams and aspirations.

I believe that many children don't realize that they are expected to grow up and get a job, support themselves, and become productive members of society.

Student # 4

For students to meet the challenge of the world in which they live, I feel it is important that hey be encouraged to develop their total range of skills and abilities in school. It is important that they have at their disposal many and varied means of problem solving and critical thinking skills. I believe that creative, rather than traditional solutions, will be needed to cope with the demands of the coming age. From my experience, I believe that much of current school curriculum generally does not allow for students to be Imaginative or inventive.

Teachers share their platform statements with other teachers and in some cases with their students. Feedback is purely descriptive and judgments are not made about their work. Assumptions are clarified and teachers rewrite. It is more than a philosophy statement. It states their position on issues that they feel are important to them. It begins to clarify who they were as a teacher. The teachers in this graduate class have an average of eight years of teaching experience. One might have think that they are quite clear about their professional roles. All of them agreed that their perceptions about themselves as teachers has changed each year.

Once they come to initial closure on their platform statement the messy task of looking at their school based behavior begins. This is when the dilemmas emerge. They often respond that they intent to do something but end up behaving differently. It continues to bother them that they have not been able to change their behavior They begin the analysis of their behavior by questioning if there are theories-in-use that are preventing me from acting on the theories they espouse. The documentation of theories-in-use has proven to be a difficult activity for teachers. While video taping, audio recording, shadow studies, anecdotal records, or peer observation might all be useful, most of the teachers depend on personal reflection.

In the process of looking at their espoused theory the teachers are encouraged to consider their knowledge base. After a review of the literature some teachers discover that their knowledge base is flawed. As part of the process teachers also do a knowledge base inventory. It allows teachers to assess their strengths as their deficiencies. Teachers always feel there is more to learn. They also need to recognize that much of what they are looking for is within them. The literrature does not always have a valid answer for every concern that teachers Face. Little recognition is given to the knowledge they have gained from practice and how it might contribute to the profession's knowledge about teaching and learning. It provides a base from which espousals can be developed.

The teachers have begun to expand their reading and study to include communication styles, lifestyle issues (pleasing, perfectionism, controlling behaviors), contextual analysis, diversity, etc. in an effort to clarify the theory upon which they act as well as their own behavior. A psychologist who has extensive experience in working with teachers and children addresses stress management and lifestyle issues with each class. It is the highlight of the class and students often take additional workshops on the same topic with the individual. It reinforces that our roles as teachers are complex and that self understanding is very important to our success.

This inquiry has lead to authentic self study as the teachers prepare a narrative paper (their personal "case study) that summarizes their journey of professional growth.

Their platform statement and analysis of their "theories-in-use are valuable ingredients in the formation of their thoughts and observations.

The narratives are rich accounts of who they are, how they got there, and where they seek to go professionally. Reflective practice and the analysis of the theoretical basis for their behavior has given them a valuable framework for understanding themselves.

Most importantly, teachers have a framework for considering new ideas of their own or others. The teachers still return to their classrooms with many questions, but they have been challenged to develop habits of mind that assist them in meaningful professional growth.

References

Anderson, R. C. (1984). Some reflections on the acquisition of knowledge. *Educational Researcher, 13, 5-10.*

Berliner, D. C. (1986). In pursuit of the expert pedagogue. *Educational Researcher,* 15(7), 5-13.

Bridges, E. M. (1992). *Problem-based learning for administrators.* Eugene, OR: ERIC Chearinghouse on Educational Management.

Brown, J. S., Collins, A., & Duguid, P. (1989a). Debating the situation: A rejoinder to Palincsar and Wineburg. *Educational Researcher,* 19 (4), 10-12.

Brown, J. S., Collins, A., & Duguid, P. (1989b). Situated cognition and the culture *of* harping. *Educational Researcher, 18(1),* 32-42.

Cochran-Smith, M., & S. L. Lytle. (1990). Research on teaching and teacher research: The issues that divide. *Educational Researcher* 19 (2), 2-11. Dewey, J. (1938). *Experience and education.* New York: Macmillan.

Kottkamp, R. B. (1982). The administration platform in administrative preparation. *Planning and changing,* 13 (2), 82-92.

Kottkamp, R. B. (1990). Means for facilitating reflection. *Education and Urban Society,* 22(2), 182-203.

McLaren, P. (1989). *Life in schools:* New York: Longman.

Osterman, K. F., & Kottkamp, R. B. (1993). *Reflective practice for educators: improving schooling through professional development.* Newbury Park, CA: Corwin Press.

Prestine, N. A., & LeGrand, B. F. (1991). Cognitive learning theory and the preparation of educational administrators: Implications for practice and policy. *Educational Administration Quarterly,* *27(1), 61-89.*

Schon, D. A. (*1983), The reflective practitioner: How professionals think in action.* New York: Basic Books.

Sergiovanni, T.J., & Starratt, R.J. (1983*). Supervision: Human perspectives* (3rd ad.). New York: Mcgraw-Hill.

Shulman, L. S. (February 1987). Knowledge and teaching: foundations of the new reform. *Harvard Educational Review* 57 (1), 31 .

Sparks-Langer, G. M., Simmons, J.M., Pasch, M., Colton, A., & Starko, A. (1990, Nov./Dec.). Reflective pedagogical thinking: How can we promote it and measure it? *Journal of Teacher Education.*

DRAMA EDUCATION IN SCHOOL: A MUST FOR THE TEACHERS EDUCATION

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Teacher Education in Hong Kong

Teachers in Hong Kong primary schools are trained by the former Colleges of Education (now the Institute of Education). Most of the primary school teachers are secondary school leavers and undergone a two to three years training in the colleges before they are allowed to teach. Teacher education in Hong Kong has undergone great changes after the War. In the Fifty and Sixties, primary school teachers are very well respected by locals At that time, education is a luxury and not all children have the chance to receive education. Many children had to work before they left primary schools. Starting from 1954, the great need of school places had had a great impact in the Hong Kong Education System. Nearly all primary schools then had to run in a bi-sessional mode to accommodate the great numbers of students. The same school premises was shared by two groups of pupils, one in the morning and the other in the afternoon. The bi-sessional mode in primary education is still operating now since properties in Hong Kong are expensive.

The scene in the secondary school is a bit different. Teachers trained from the collages of education can teach up to secondary three and they are all subjected based in training. Any one with a recognised degree can teach in the senior form of a secondary school. These teachers are untrained and they usually will have to pick up a Post-Graduate Certificate of Education after they are teaching for a while in schools. Again, these teachers are subjected based.

The sense in the primary school changed a little bit starting from the seventies. Beginning teachers in the past are trained by subjects. Nine years free education was introduced. Also, learning theory and other education theory begins to take roots in teacher education. The introduction of Activities Approach signified the new concept of primary education. There is a trend in emphasis on general education of a teacher. A larger proportion of the studies goes to education theory. Nowadays, primary school teachers have to teach at least three to four subjects.

The rationale for the present teacher education system

Hong Kong is a cost effective city and teacher training scheme is limited by government funding. In order to maintain Hong Kong a highly competitive society, a large proportion of the education funding is spent on the tertiary education. The 400 000 plus primary students receive less than 15% of the funding. The present system of teacher education, a two to three years training, is found to be most cost effective.

Teachers in China are working under very difficult conditions than the counterparts in Hong Kong. There are some concerns to the local educators in terms of changes in the future education system in Hong Kong. The worries can be summarised in the following:

- Qualified teachers in China may come to teach in Hong Kong and there is a possibility that some of the teaching jobs at Hong Kong are at stake. As the salary of a teacher In China and in Hong Kong is differed by more than ten folds. This may result in diminishing demand of local trained teachers.

- More political issue being geared at future teachers education. For example, the Issue of nationality education is one. Teachers more involved in political movement is another. As Hong Kong people are less involved in politics, this is one worry of the teachers that the freedom inside the classroom will be restricted. And new format of teacher appraisal system be introduced.
- Teacher education in Hong Kong is always in line with educational reforms carried out by the Government. The introduction of the new syllabus of General Studies in the primary education is one, and the Target Oriented Curriculum, a top down curriculum reform, is another. The future Hong Kong government can affect teacher education very easily by introducing new educational policy.
- Primary education In Hong Kong begins to gain momentum on the activities approach and school based curriculum, at least in the lower primary level. Teacher education in China is more subject based. Teacher Education in China may affect the future development of the Hong Kong teachers education.

In short, there may be a basic structural change in the teacher education in terms of the intake of students, assessment and the possible decrease in funding in teacher education in a few year times.

The missing bit of the Hong Kong Education

In a small research with the teachers, they indicated that the kind of education being missed In Hong Kong primary school include the following.

a) Group Education, a kind of training in group activities and discipline, and the relationship between an individual and the society. This is very similar to the role of civic education. Civic education in Hong Kong is mostly implemented by the subjects Chinese and General Studies. However, civic education requires knowledge, action and reflection. Without action and reflection, which is not quite possible by classroom teaching alone, group education cannot be successfully implemented.

b) Social Education: to interact with different classes in society. Broadly speaking, socialisation is the "impilcit curriculum" of schooling through which children learn about other people and themselves in the process of learning the academic skills that schools are meant to teach.

c) Education on Intellectual Thinking: It is the process of making assumption from reality or from literacy pieces so as to make further assumptions on lives.

The above three elements can be **successfully supplemented by introducing drama education.**

What is drama ?

Drama can be defined as (Esslin 1976):The art form of drama is the dynamic embodiment of events involving human beings. It comprises a group of people agreeing to suspend their disbelief in order to be other than themselves in a fictional context. If they enact the events in fronts of others who accept the fiction, the drama becomes theatre.

The definition of drama is not an absolute one, the definitions of a concept like drama should only be treated as an outline for the fluid boundaries of a given field.

Role of drama in the development of local culture

Before the War, Hong Kong is still a small harbour and Canton is more developed than Hong Kong. Culturally Hong Kong is part of Canton and is very much influenced by it. After the Communists take regime, Hong Kong is more detached from China for the first time. The first drama competition was organised the Education Department from 1949-59. By that time, some drama groups were formed by intellectuals from China. In 1955, the first Hong Kong Arts Festival started but it only lasted for 6 years. The completion of the Hong Kong City Hall in 1971 marked a new era in drama activities. Before, drama was only performed at community centre or school hall.

Local consciousness on culture and started when the Chinese University of Hong Kong formed in 1965, a forming of different colleges formed by people coming from China. This signified the era of local identity in the intellectual circle. And for the first time, tertiary students started their Drama festival. The festival was meant for the understanding of Chinese culture and China. The festival lasted until 1977, after China ended its cultural revolution and students in Hong Kong had to face the reality that passion for revolution may be impractical and what they had believed is an untrue picture of China

Drama Education in the eyes of the public

People view arts and drama education as a kind of decoration of a stability society. It is not really needed. Education given in the Academy for Performing Arts emphasised mostly on technical know how and theatre training, little on arts appreciation and development.

Drama is still now not a very popular cultural activity In Hong Kong. In fact, Hong Kong Theatre cannot survive without government subsidy. For example, the Hong Kong Repertory and the Hong Kong Dance Company received a subsidy totalling of 45 millions Hong Kong dollars in the year 1995, compare to less than 6 million Hong Kong dollars they receive from box office. The eighty percent subsidy from the government was only shared by 55,000 audience.

Drama in school is only a kind of extra curricula activities. However, many of the drama activities are either performance link (school yearly function) or competition link (Drama Festival). The training and activities given by the Education Department place insufficient attention on stimulation of thinking and creation.

Many even regard drama education a kind of play similar to the activities children received In kindergarten When we talk about drama can provide opportunities for the students to a) understand and know themselves, b) communicate effectively with people, c) to share with other, and d) to use speech, songs and music to express themselves; many are hesitated In the Introduction of drama as the assessment of result is difficult.

However, more educators shared that classroom teaching alone is not sufficient to bring about the education of a whole person. Educators then resolve the problem by extra curricula activities. The following is a list of drama activities related to this issue.

Drama Tour offered by the Drama group (TIE) in Hong Kong

There is little Theatre in Education (TIE) in Hong Kong and no Drama in Education (DIE). Drama is not in the school curriculum. Many drama groups receive government grants to do school tour. However, they are more concern on the number of audience rather than the impact of the tour or the educational values. There is little follow up and little work is done on drama appreciation or criticism It is more like drama production with school delivery. The following is the figure of the school tours conducted by the five main theatre groups in Hong Kong.

Year	90-91	91-92	92-93	93-94	94-95
# of Tour	215	195	196	202	325

The figure of school tour in 1995-96 Is around 400. Each school tour will normally entertain 150 to 250 students. Very few of the school tour will gather more than 600 students though occasionally this is the case.

The Hong Kong Drama Festival

The Urban Council of Hong Kong organized its first Drama Festival in 1979 and became an annual event since then. The festival adopted an open competition. The view of the Festival was to promote theatre arts and encouraging original play creation. Each year, there are more than a hundreds entries for the competition and about 15 to 18 of them have chance to enter the final and compete on stage. Resources provided do the finalists include subsidy and four basic lectures covering stage management, directing, acting and script-writing .

The Hong Kong School Drama Festival

The Festival stemmed from the Hong Kong Drama Festival in 1991. It aims to provide a competition among secondary schools and primary schools. Over 95 % of the 800 primary schools in Hong Kong are using Chinese (Cantonese) as their medium of instruction. As Education Department is the main sponsor of the competition, the festival is well received by schools. The Education Department also provides some training for schools. It is product oriented, which involves the making of pops and employing people to do stage design and costume.

The figures for the five years participation are:

Year	91-92	92-93	93-94	94-95	95-96
# of Schools	109	129	142	175	181

Drama Is effective In education

The description of the above paragraphs showed that drama activity now is very heavily performance based. However, the essence of drama education should be on the process of the learning. Drama is always a kind of education. Many illiterates in China learn the moral concept through Chinese musical drama. However, drama education is not in the business of making plays nor it is a kind of entertainment. It is a non-product oriented activities. One effective use of drama education is the using of role play. Not only that role play can improve the learning of languages, but also that role play can achieve the effect of empathy and value clarification.

Empathy and Value Clarification In Role Play

Many teachers already find that drama activities can be a vehicle for learning language. They are already using a little bit of role play in the lessons. The using of role play to clarify value is a good choice as role plays allow students to see problems in different approach and aspects. The function of role play is to allow students to explore their own feeling and attitude. Role play is closely related to daily experiences. Children can understand the exchange of role and are able to do that at the age of eight. Through improvisation and by stepping into others people world, can one learn to empathise with human conditions and social context beyond their personal experience. Also, our own personal presentation and self-confidence are improved through the presentation of role play.

What drama can do in Primary Education

To have an effective teaching result, we may have to look at the ways children learn. There are a lot of research in children psychology of learning and in summary, we can pay attention to the following learning pattern of children.

1. Firstly, children learn a lot before they go to schools. They have already learn how to talk, they learn their language not because they are taught by their parents but that they hear language as a whole, they interact with people, they use the language for different purpose, and they are encourage to use the language by the adults striving to understand and make sense with what children are talking. In short, home is a learning place and children learn their language from daily lives. However, classroom is usually not designed for this purpose. In Hong Kong, children are encourage to be every quite and listen to the instruction of the teachers. How children learn language successfully at home is in fact a form of drama activities which is not explained.

2. In drama lessons, children not only have chance to practice their talking, they also learn through play. The reason is simple. Play is voluntary, and children can have control over It. They can stop or withdrawn whenever they chose to. They can also set their own goals and their mistakes will never be punished. After all, the activity is relaxing and full of fun, Drama is a more directed form of play and the lessons provided can develop the children's imagination, organising abilities confidence and language. The less bright children still have the chance to become successful. Apart from this, drama can provide children with group feeling developed in class and make friends easily. The same applies to adults. In Hong Kong, many teenagers join different amateur group and through drama production, they become very good friend and the relationship and the workings enable them to learn and share with each other.

3. Drama activities have the chance to reveal ourselves. Only In activities will people reveal themselves. Drama lesson in lass will enable teachers to know more of the character and the inner feeling of the children. This Is also one reason that some adults refuse to loin In drama activities as they are not too comfortable to expose

themselves. However, children are not cunning enough to hide their feeling if the exposure of such feeling will not result in punishment. In revealing ourselves, can an individual understands more of the classmates and himself. The understanding of the existence of variety of thinking and philosophy of lives will enable the patience and the co-operation to come.

4. As ensemble performance demands sensitive perception, understanding, and control of individual relationship with group or society, It can response to the call of group education. As participants have to respond to other in the process of role play, it also confronts the participants with the predicting consequences of behaviour.

Rationale for the using of drama in education (Heathcote, 1976)

1. Drama is about truth, not pretending, drama activities can get the students' feeling easily. Students have chance to support and challenge decision make by the class.
2. Drama puts students into pressure, pressure to express themselves and their feeling. Students will identity with people in the crisis of the drama.
3. Drama verifies values and to develop a tolerance for a variety of personalities and ideas.
4. Drama enables them to stay with something they do not like and are able to work through to certain point of accomplishment.
5. Drama helps students to discover that they know more then they thought they know.
6. Drama leads students to see the real world more clearly by what is revealed in the imagined one.
7. Drama enable the children's autonomy as learners.

To do so, we encourage students to become enrolled and de-roled repeatedly. To enrol is to get into the feeling of other people, to derole is to allow time for discussion and other planning. We can use a sequence of teacher and children in role, out of role and in role again. Teacher may use the out of role session for narration, and discussion on how to proceed, followed by possible extension. There should be clear cut on-deroling so that children will be able to distinguish the real world and the fantasy.

With the above statement, it is advisable that drama education should be In the school curriculum.

The possible hindrance and threshold of the teachers towards drama activities

The function of a teacher is to ensure that students are learning to their maximum capacities. The function of a drama teacher Is a subtle one. Drama teachers are expected to challenge, arouse interest, make anxious, give confidence and encourage reflection. As teachers In Hong Kong are not equipped in such learning, they are less confidence to take up drama activities. They simply do not know how and where to start. Also, some enthusiastic teachers find that sometimes the drama activities exceed their limits of their own security when students are lively participating in the activities. They may not aware their limit or learn how to extend their limit and so was avoiding drama activities. These thresholds are best described by Dorothy Heathcote "that teachers vary in the seven thresholds of their own security".

1. Noise Threshold: Beginner teachers are discomforted by the level of noise that drama activities generated. They do not distinguish between noise level and noise quality. Hong Kong teachers are used to a quiet class and disciplined activities.

2. Space Threshold: Many teachers are used to teach with students near to them Only some prefer to teach at a distance. Teachers usually do not try different choices.

3. Size of groups threshold: In Hong Kong, drama activity is usually conducted In a big group. In some school, the drama club has a lot of members. Many teachers find it difficult to cope with.

4. Decision making Threshold: Drama activities involve a lot of decision making and such creativity activity has no particular format. Teachers find it difficult to make "good and correct" decision.

5. Teachers interest Threshold: Teacher's own interest may be different from the Interest of the class. Teachers need to be open in the interest and in many cases, the themes of the drama activities are already fixed and the unification of interest is difficult.

6. Evaluation and Standard Threshold: Different values hold by teachers resulted in different mode of evaluation. As there is no one standard of evaluation, teachers are difficult to tell if the goals of the activities are achieved.

7. Role Threshold: To make drama education successful, teachers have to avoid the "I'm telling you" mode. The roles of the teachers in the drama activities need to be varied, as a guiding friend and as a source of knowledge.

Why Drama Education is not In the present curriculum

- People usually think that drama is not serious. To introduce drama In education Is a bit informal All arts education in Hong Kong face similar situation.
- Only 20 years ago, actors are still considered the lowest rank of profession in the Chinese circle. Proper families do not send children to go into this business. Acting Is a "bad" profession unless you are famous. Many parents resent to have their children to present on stage.
- Actors are now more accepted as a profession, and parents also see the importance of school activities. However, parents in Hong Kong are usually examination oriented. Even schools in Hong Kong are mostly examine oriented. Drama education can benefit their children nothing in terms of academic assessment.
- Schools in Hong Kong are competing among themselves for students and for reputation. Difficult curriculum and examination results are still the main consideration of schools.
- Teachers avoid taking drama activities as this will mean a lot of extra time. Many teachers responsible for extra curricula activities have the same pressure on their time resources.
- Schools in Hong Kong are run in bi-sessional mode. It is quite Impossible for drama activities to be carried outside school hours. Other extra curricula activities in Hong Kong primary schools share the same fate.

The rationale for the Inclusion of drama In the teacher education

1. Many teachers would like to employ drama as a tool in education. However, they are not trained in this issue.

836

2. Teachers learn to teach drama by teaching drama, as we learn to write by writing and learn to talk by talking. There Is a strong emphasis on language in drama. There are a range of language being used in drama activities. The language will reflect the context of the drama, the roles taken by the children, and the development of the plot. The languages shifts used in drama activities help children to learn different content. And gradually the events of drama will be brought into a sharper focus.

3. Trainers are sometimes employed by Theatre company which successfully obtain grants from the Arts Development Council and provide workshops for the students. These kinds of workshops are not performance base, though it may have the primary functions to train students to be more confidence on stage through the workshop. One short coming is that such workshop is very short in time span, usually last for several meetings and the result is difficult to sustained. Preliminary results show that if school teachers can take the role of the trainers and provide drama activities in school consistently, the result will be more sustaining and satisfactory. Only by introducing drama education in the teacher education can this elm be fulfilled.

4. Bolton (1979) indicated that many drama activities in school belonged to the following types. A) Drama exercise: which is usually short-term, instructional with clear rules B) Dramatic playing: which is featured by no special goal, difficult to repeat experience, and the level of thinking often shallow, governed by "what happen next ?" mentality. Also, it does not require high level of emotion. C) Theatre: which demand for clarity in speech and action, with skills lies in pretending and demonstrating. All work geared to an end product He indicatedthat type D drama, drama for understanding may be more desirable. The present training given in Hong Kong schools Is mostly of type A or B.

CONCLUSION

Drama education is desirable in the school curriculum. This can help bringing out the cycle of knowledge, action and reflection for the development apart from the benefit of using drama as a mean in learning languages. As teachers are not equipped with this vehicle, they are hindrance in working it. They even mistaken that the works of a type A or type B drama activity is already a good drama education without realising that drama education is for understanding. It is this concern that drama education should be include in the teacher education.

Reference

Bolton, G (1984), Towards a Theory of drama in Education, Longman.

Courtney, R. (1986), The Dramatic Curriculum, Drama Book Specialists, New York.

Curriculum Development Council (1994), Syllabus for General Studies (Primary I - VI), Hong Kong Government Printer.

Esslin, M (1976), An Anatomy of Drama, Penguin.
Heathcote, D. (1976), Drama as Education in Children and Drama, ed. Nellie McCaslin, NY, David KcKay.
Hong Kong Government, Hong Kong 1990, Hong Kong.
Hong Kong Government, Hong Kong 1991, Hong Kong.
Hong Kong Government, Hong Kong 1992, Hong Kong.
Hong Kong Government, Hong Kong 1993, Hong Kong.
Hong Kong Government, Hong Kong 1 994, Hong Kong.
Hong Kong Government, Hong Kong 1995, Hong Kong.

838

HOW CAN TEACHERS ACTIVATE STUDENTS' COGNITIVE STRATEGIES BY USING ADJUNCT QUESTIONS? A PRESCRIPTIVE INSTRUCTIONAL MODEL FOR IMPROVING TEACHING AND LEARNING

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INTRODUCTION

In this age, characterized by wide use of advanced technologies, Instructional designers are concerned about now to design Instructions In a way that helps the new generation to De good thinkers Developers managers evaluators and decision makers rather than being just information recipients. These intentions became very important especially after the cognitive revolution that the field of psychology has witnessed for the last two decades the cognitive revolution has pushed instructional designers to shift their attention. While they design instruction from behavioral approach to cognitive approach (Norman, 1977, Gagne. Briggs & Wager 1992 Jonassen 1988; Reigeluth 1983).

Behavioral approach focused on how to sequence external stimuli In a way that leads to the desired behaviors Behavioral psychologists accordingly, did not pay attention to what is going on In the learners mind In contrast. The cognitive psychologists put a great emphasis on what is going or in the learner 's mind. Learners from their points of view are processors of information and constructors of Knowledge. They also have Control over their cognitive strategies (Mayer, 1992; Darwazeh. 1994).

Since then cognitive psychologists have hypothesized that activating learners cognitive strategies will held them to process, store and retrieve information on high levels of learning, hence their academic achievement wall enhance remarkably (e.g., Ausubel. 1960, 1964: Peper & Mayer, 1986. Reginy. 1978: Rothkopf. 1966, 1970: Wittrock, 1974a, 1974b, 1985, 1991, and 1992).

To verify this assumption numerous studies nave been conducted between the1960's and 1990's on cognitive strategy activators Researchers have used different types of cognitive activators. Such as Adjunct Questions (e 9 Andre 8 Anderson 1979 Darwazeh 1982 1996 Darwazeh 8 Reigeluth 1982 Davey & McBride 1986 frase & Schwartz. 1975 King 1991 Seretry & Dean 1986) Advance Organizers (e.g. Ausubel 1960, 1964 Dinnel Glover 1985 Di'Vesta & Peverley 1984 Doctorow Wittrock & Mark 1978 Kenny. 1992 Mayer 1978 1979 Wittrock 1974 Wittrock & Carter 1975) Analogies (e.g. 9, Dean. et al 1990 Newby & Stepch 1991), Heading and Sentences (e 9 Dee Lucas 8 DiVesta. 1980 Jonassen et al 1985 information Maps (e 9 Ally & Szabo 1992. Cha 8 Dwyer. 1991 Dansereau et al 1979 Lambiotte 1993 Lambiotte & Dansereau 1992 Lenz 1992: McCagg & Dansereau 1991) Note-taking (e.g. Britzing et al 1987 Kiewra & Frank, 1988 Peper & Mayer ~ 1986 Simbo ~ 1988 Shrager & Mayer, ~ 989), Pictures and Images (e.g. Bull 8 Wittrock 1973 Carrier et al 1993a 1983b, Holmes 1987 Rigney 8 Lutz 1976. Pressley, 1976 Essen 8 Hamaker 1990) Summaries (e 9 Annis 1985 Harris 1992 Hooper, et al 1992 spurline, at 1988 Wittrock & Alesandrini 1990 Synthesis (e.g. Beentijes & Van der Voot cognitive processing. Such as to remember to understand to know to recall, to recognize etc whereas the high level of adjunct questions requires students to implement a complex level of cognitive processing such as to apply to analyze to synthesize to solve problems to evaluate, to find. etc

Several studies have found that the depth of cognitive processing was influenced by the high levels of adjunct question (i.e. application inference analysis synthesis, evaluation). Thus higher the level of adjunct question the deeper the level of processing, the greater he degree of meaningful learning and the longer the retention, Felker 8 Dapra 1975 Friedman & Rickards 1981 Rickards & DiVesta 1974 Rickards s Hatcher 1978 Shavelson et al 1974 Watts & Anderson 1981 Yost, Avila. & Vexler 1977).

With respect to the position of adjunct question researchers have manipulated them terms of two positions 1) pre-questions In which quest ions appear before Instruction as "when students answer questions that are Inserted before reading the relevant passage" and, 2) post questions In which questions appear during or after Instruction, as "When students answer questions that are inserted during or after reading the relevant passage" (See Darwazeh 1982 Darwazeh & Reigeluth 1982 Darwazen 1996 Rothkopt 1966 Anderson & Biddle, 1975 Frase, 1967.

Research Problem

Although adjunct questions are widely use at our schools in Palestine and other Arab countries there was no.: attempt by researchers to specify conditions for the best use of adjunct questions thus no one has tried to draw an Instructional mode on adjunct questions In the aim of directing teachers on how to use adjunct questions and when.

Therefore the purpose of this research is to specify conditions, hence to propose a model of adjunct questions for classroom teachers In the aim of showing them how to use adjunct questions efficiently in fact, the aim of Proposing such a model Is to Improve students academic achievement as well as to Improve teachers' performance.

Research Questions

The current research tries to address the following questions:

1. Under what conditions is embedded versus generative adjunct questions' systems effective?

2. Under what conditions are pre-questions versus Post-questions effective?

3. How can we design instruction In a way that Zeros teachers to use adjunct questions in their teaching properly and efficiently?

In order to address these questions it would be beneficial to summarize the results of some previous studies that have been conducted on adjunct questions In terms of their Instructional systems, positions and their interactions with question level and student ability The review of the literature would help us as instructional designers to specify conditions under which adjunct questions will be effective then to Propose a prescriptive model of adjunct questions.

Review of Literature On the Instructional System of Adjunct Questions

There are several studies that have investigated adjunct questions as Embedded versus Generative Cognitive Strategy Activators (GS vs. ES) Of those studies. Manzo

(1970) has conducted a study on 41 students aged seven through twenty five enrolled at Syracuse University Remedial Reading Program He distributed them into two random groups one group was encouraged to generate there own questions (GS) the other group was not encouraged to do such activity during the remedial reading program The teacher just directed their reading activities and used a popular teaching technique (ES By using pre and Post experimental design Manzo" found that the (GS group s mean was significantly enhanced on reading comprehension and vocabulary tests from pre to post tests' administration whereas the (ES) group's mean was significantly enhanced from pre-Post tests administration on the reading vocabulary test only.

Helfeldt & Lalik (1976) also found a superiority In favor of (GS) They used a random sample of 22 fifth grade students and divided them randomly into two groups. The first one was a reciprocal student-teacher Questioning group in which students were reminded at the beginning of each session that every time they respond correctly to the examiners questions they could then ask the examiner miner a question (GS) For the second group the examiner asked the questions without encouraging questions by students (ES) Helfeldt & Lalik found that the (GS) group performed significantly better than (ES) group on the interpretative reading subtest but not on the comprehension subtest.

On the other hand. Grouse & Idstein (1972) found a superiority of generating questions over reading a passage only (control group) In their experiment No 1. they used four treatment groups The first group was directed to think of the Posttest questions related to each underlined par of the text (GS) The second group was directed to read the posttest questions winch were presented following the underlined part in the prose passage (ES) The third group was directed to head the underlined near sentences that related to the posttest Questions Finally the fourth group which served as a control group was simply directed to study the passage without Questions or underlining 'he three experimental groups including the generated Questions group (GS) performed significantly better than the control group on a 22 item short answer posttest measuring overall recall, but there were no differences among the experiment groups including the (GS) and the (ES) group.

Duell (1977) reached similar results to the Crouse & Idstein ones when he used 103 undergraduate students and assigned them randomly into three groups One experimental group received a passage, a list of objectives and instructions to write questions to match the objectives (GS) Another experimental group was instructed to study the passage with a list of behavioral objectives without generating Questions The third group was a control group which just took the criterion test On a 31 item multiple choice posttest measuring recognition and application level of learning, the group which was asked to generate questions matching the objectives (GS) outperformed significantly the other two groups who were not involved in objectives (GS) outperformed significantly generation questions

Frase & Schwartz (1975) also found In two experiments that generative questions (GS) whether In Individual Instruction or In a tutorial situation have a beneficial effect over reading the passage only out not over teacher generate questions (ES). A 90 minute tape recorded Immediate posttest measuring targeted (remember) and non targeted (application) items was administered on 48 high school students in the first experiment whereas a 60-item short answer posttest measuring the same levels of learning. Remember and application was administered on 64 college freshmen In the second experiment. The result of experiment indicated that questioning and answering activities (GS+ES) after reading produced significantly higher overall recall than reading only but there was no significant difference Between the Questioning condition (GS) and the answering one (ES) whereas the rest of the second experiment Indicated that (GS) Group only outperformed significantly the control group.

The interesting results of 8 Shawartz experiment No.1, was that the declination of the (GS) group's scores from remember to application subtest was (12) points whereas the declination of (ES) groups scores from remember to application subtest was s (18) points. This could be considered as a hint that the (GS) group was more able to answer higher order-level questions (application level) than the(ES) group.

Davey & McBride (1986) found in their study using 50 sixth grade students and 8 free-response Items measuring literal and inferential level of learning, that students who were Corrected to generate two good (high) think type questions for each passage (GS) performed significantly better on the Inferential posttest Item than the read reread control group. However there was no difference between the two groups on the literal posttest Moreover, no interactions were found between reading skills and attests on the question-generation.

Andre & Anderson (1978 1979) have also shown in two experiments that questions generation (GS) was more beneficial than just reading the passage only. especially when generative strategies are accompanied with a training session. However they could not find a significant difference between the (GS) and the (ES) groups.

Recently King (1991) asserted the effectiveness of training when accompanied by the generation of questions. He found hat learners who generated questions to guide their cognitive and meta-cognitive activity after receiving a kind of training on how to generate such questions (GS+T performed significantly higher on Both a written test of problem solving and a novel computer task than the other groups who generated such questions without training (Gs-T) and the control group who were not invade In such an activity at all. King used 46 fifth graders for his experiment

Dreher 8 Gambrell (1982) On the other hand could not find significant differences between the question training group (GS+T) or question-writing group with no training (GS-T), and the re-read control group on a constructed response comprehension test containing both man and detailed question. They used 60 sixth grade boy students.

In contrast to the above results. Darwazeh (1982) found In her dissertation with 181 tenth graders that students who received lows and medium level questions from the teacher (ES) performed significantly better than students who were directed to generate the same levels of questions on a total posttest Which consisted of 19 short answer Item The total test measured three levels of earning remember an instance remember a generality and use a generality (application) However the (ES) group could not outperform significantly the (GS) group on the high level of learning such as the application level.

Darwazeh (1996) asserted the above results and found In her experiment using college students that embedded groups which were required to answer the teachers questions before during and after reading a relevant passage (ES) got higher means on remember instances remember generalities comprehension and problem solving subtests than the generative group Which was required to generate and answer is own questions during reading the same passage (GS). However he conferences did not reach a significant level.

Seretny 8 Dean (1986) found that answering questions during reading a passage as (ES) was effective In enhancing average and below average readers' but had a little eject on he above average readers Seretny & Dean used 54 second grade students. and a comprehension subtest of the Wcience Research Associates Achievement Test Battery.

On the other hand some researchers failed to find a significant difference between (ES Vs GS) by using adjunct questions For example Bernstein (1973) found no significant differences between generative (Gs) and embedded groups (ES) on either comprehensions or problem solving tests Bernstein used 90 Sixth grace students in his study.

Owens (1977) concurred with Bernstein n results and could not find any significant difference among the three treatment groups a group which was instructed to produce their own multiple choice questions (GS) a group which received multiple choice questions (ES) and a group which was Instructed to read the passage only (control group). He used 87 undergraduate students and a 18-multiple choice Question test administered immediately after the experiment.

Conclusions:

According to the above results we can conclude that the student generative questions system (GS) was effective in most cases over a control group that was required to recta a passage Cut not over the teacher generative questions system (ES) The effectiveness of (GS) appeared on medium and high levels of learning (i.e. comprehension, interpretation, application inference and problem solving) and with high ability students whereas the effectiveness of (ES) was revealed with low levels of learning (i.e. remember recognition and with low and medium ability students the training procedure seems to be needed with the generative Instructional system (See Figure 1)

Review of Literature On the Position of Adjunct Questions

A good number of studies have investigated the effect of adjunct questions. position and its interaction with questions level and students ability. The aim of those studies was to see whether pre questions are more effective than the post questions and when!

In one of those studies. Frase (1967) found that when questions were inserted after the relevant passage both retention (remember) and incidental (application) levels of learning were facilitated whereas when questions were inserted before the relevant passage only retention level of learning was facilitated Frase use In his study 72 college students and d 4 multiple choice items to measure retention and incidental levels of learning These results concurred with Rothkopt's results (Rethkopt ~ 966 Rothkopt & Bisbicos. 1967) which educated that prequestions were effective on retention level of learning whereas postquestions were effective on retention and incidental levels at learning. They used 252 high school students and 48 completion question criterion test measuring specific and general retention.

Frase(1968) sustained the above results and found. By using 128 college students, that postquestions have facilitated relevant (remember) and incidental (application) levels of learning He used a posttest of forty items measuring those two Levels of learning.

Anderson and Biddle (1975) reviewed a good number of previous studies on the effectiveness of using different positions of adjunct questions during instruction and found in (37) studies that postquestions facilitated remember level of learning and in (26), that they facilitated application level Of learning But they found In (10) studies that prequestions facilitated remember level and only In (4! studies found prequestions facilitating application level of learning Accordingly, they concluded that the use of adjunct questions had a facilitating effect on learning from prose When Questions were placed after the text, they had a significant facilitating effect on the repeated (intentional or remember) Items, and on the new (application or incidental) items whereas when

843

adjunct questions appeared before the text they had a significant facilitating effect on Intentional or remember items only

Using 75 college students. Rickards (1976) also found that conceptual prequestions produced higher recall than conceptual postquestions on a posttest measuring low levels of learning Such as verbatim (Remember) and conceptual (comprehension) levels of learning.

Felker & Dapra (1978) found on a problem solving test that comprehension postquestions had a higher facilitating effect than the groups which manipulated pre-comprehension postquestions pre verbatim questions or cost verbatim Questions They used 95 undergraduate students and 21 comprehension 21 verbatim (remember) and 5 problem solving (application)-items post test.

In her experiment resulting 78 college students to manipulate adjunct questions before, during and after reading the relevant passage Darwazeh (1996) also found that the means of during and postquestion groups were higher than the mean of prequestion group and these differences were found not only on the remember level of learning, but also on the comprehension and problem solving levels Yet the differences were not significant.

Other studies found significant Interactions between position of adjunct questions and type of learning Sanders (1973) for example. found a significant Interaction between position of adjunct questions and relevance of criterion questions Which indicated that prequestions facilitated relevant for remember) questions whereas postquestions facilitated irrelevant (or application) questions Sanders u sea 72 college students and 40 Item multiple-choice immediate and delayed test measuring relevant and irrelevant information.

Andre', et al (1980) In their experiment 1. and Darwazeh & Reigeluth (1982) found similar significant Interactions between level and position of adjunct questions which indicated that the adjunct questions facilitates higher level of learning (application) when they were inserted after the passage whereas the adjunct questions facilitated lower level of learning (remember) when they were inserted before the passage One hundred and twenty undergraduates and 80 posttest measuring remember and application levels of learning were used In Andre's study whereas 74 eighth grade students and 9 short answer posttest questions measuring remember and application levels of learning were used in Darwazeh 4 Reigeluth's study.

Sagaria & DiVesta (1978) also found a significant interaction between type of learning and placement of questions which Indicated that the Incidental performance was the lowest In prequestion treatments whereas the Intentional and Incidental performance was the highest in the postquestion treatments He used 150 college students and 30 Items posttest measuring international and Incidental levels of learning.

In contrast, Andre and his colleagues (1980) found opposite results in their experiment number 2; they found an interaction which indicated basically that performance was better on name questions when those questions came after the relevant text than when they proceeded it while the effects of application questions did not differ with 'heir position They also found In their experiment number 3 that performance on application questions was better when those questions were Inserted before the text whereas performance on name questions was better when they were inserted after the text They used 155 college students In their experiment No 2 and 87 high school students in experiment No.3 with me same posttest that was used in experiment No.1.

With respect to another kind of Interaction the interaction between questions' position and students' ability Hudgins et al (1979) found a significant interaction which indicated that postquestions enhanced learning of high ability students whereas

844

prequestions did not make a deference in the learning of low or high ability students Hudgins used 166 fourth, fifth and sixth grade students and 63 multiple choice questions posttest measuring remember and application levels of learning.

Darwazeh (1982) sustained the above results and found a significant interaction between prequestions and students' ability Which Indicated that prequestions enhanced the learning of low ability students whereas postquestions enhanced the learning of high ability students She used 181 tenth grade students and 19-item short answer questions measuring remember and application levels of learning.

Memory (1983) also found significant Interaction between prequestions and students ability level which indicated that below average readers who were given prequestions performed better on the post subtest measuring main Ideas than those who had did not receive such questions, whereas the low and high ability students did not differ on the literal post subtest Memory used 96 sixth grade classes and a posttest Containing 8 short answer items measuring main ideas and 20 multiple choice questions measuring literal information.

Sanders (1973) also found that low ability students Performed better with prequestions whereas high ability students performed better with postquestions He also found another king of interaction between the position of questions and the type of content which indicated that prequestions facilitated learning of specific information whereas postquestions facilitated learning of general information Sanders used 72 college students, and 40 Item multiples choice Immediate and delayed test measuring relevant and irrelevant information

Conclusions

The above results Indicated clearly that prequestions were effective with lower levels of learning (i.e., remember direct or Intentional learning) with low ability students, and with a content containing of specific information, whereas postquestions were effective with lower and higher levels of learning (e . remember, direct, or intentional learning, and application indirect or Incidental learning) The effectiveness of postquestions also appeared with medium and high ability students and with a content et general information (See Figure 2).

Research Implications

The research finding have an important implication for designing Instructional material e.g. for designing textbooks computers programs curriculum lesson plans, etc. Therefore the major purpose of this research Is to craw a prescriptive instructional design model of adjunct questions he model Is recommended to be used either try teachers when they design a lesson plan and when they teach or by Instructional designers and developers when they design schools" curriculums, textbooks or computers' programs The model will be discussed from tour angles. 1) rationale for creating the model 2) aims 3) conditions and 4) procedures.

1. Rationale:

The Science of Instructional Design has been prosperous in the last two decades, Instructional designers have done a great deal In designing Instructional material, including projects curriculums units lessons and lately computer and Interactive Video discs' programs (e.g. Briggs 1977 Briggs & Wager 1981 Darwazeh 1995 2

Dick & Carey 1990 Gagne Briggs, & Wager 1992 Reigeluth, (Ed) 1983, Mirrell 1983 Pratt 1980).

Although instructional designers have tried to propose several instructional models for designers instruction on the cognitive strategy activators have not retrieved been included in their models. Some of them rave mentioned marginally that cognitive activators Should be included in the models of instructional design without saying how to do that (e 9, Reigeluth. 1983 Mirrell 1 983) Others have done a good review of previous studies on cognitive activators and tried to put a template of instructional design (e 9 Nest Farmer & Wolf 1992, pp 209 263) Darwazeh ~ 1994 Is the only researcher so tar who has proposed a comprehensive Instructional design model which considers using cognitive strategy activators Yet. she has not designed a specific model for each specific cognitive strategy activator Thus, In the current research the author tried to propose a specific model for adjunct questions as cognitive strategy activators, he researcher hopes other researchers Including herself will draw other instructional models for other cognitive strategy activators in the nearer future.

2. Aims Of the Model.

The aims of the proposed model are directed toward learners, teachers, instructional designers and curriculum developers

a. For Learners

Using adjunct questions as cognitive strategy activators before. during and after instruction either as an embedded or a generative system, Will help learners to:

1. Stimulate their cognitive strategies and use adjunct questions properly during learning.
2. Focus attention on the major and important points in the text.
3. Increase their levels of motivation to learn.
4. Summarize the content information Intensively
5. Have control over their cognitive and meta cognitive strategies
6. Input process and output information effectively.
7. Make the complicated information more manageable, and understandable
8. Process information on deep (or high levels of learning. hence to store Information In the long term memory
9. Practice what they had learned and
10. Retrieve information for later use especially for solving either academic or personal problems.

b. For Teachers, Instructional Designers, and Developers:

Using adjunct questions as cognitive strategy activators in planning, teaching, or designing instruction will help teachers designers and Developers to:

1. Design the Instructional process comprehensively.
2. Compensate the defect if any in the methods of teaching specially for novice teachers.
3. Make the intended content more Interesting,
4. Promote learners achievement on higher levels of learning and

5. Enhance the quality of teaching hence the instructional process as a whole

3. The Procedure of the Model and Its Condition:

Using adjunct questions by teachers. designers. or developers needs from them to perform the following steps

1. Select what content they are going to teach or design (i.e., projects, textbooks, programs' passages, lessons etc).
2. Determine the level of Performance (level of learning) they want learners to demonstrate by answering certain questions is n low medium or high?
3. Analyze learners' characteristics: Are they above average, average below average, of high or low motivation? Are they trained on generating adjunct questions or untrained, or what? Determine!
4. Analyze content characteristic Is it sequenced from specific to general or from general to specific information Does it contain mainly concepts principles procedures, or facts or what? Determine.
5. Determine the instructional system they want to use in presenting adjunct questions. is it the embedded system or the generative one?
6. Determine the level of adjunct questions they are going to present is it low, medium, or high ?
7. Determine the position of adjunct questions. Is it before, during, or after Instructions?
8. Put adjunct questions and make sure that they cover all the information that came in the relevant passage. and measure all levels of learning they want to promote
9. Present (or teach the intended content.

10:1 Use adjunct questions as an embedded system (ES) under the following conditions:

a. When they deal with students of low and medium abilities
b. When they want to promote learning on low levels and
c. When they deal with students who have not been trained in generating adjunct

Questions.

10:2 Use adjunct questions as a generative system (GS) under the following conditions

a. When they deal with students of high abilities
b. When they want to promote learning on medium and high levels, especially the high levels, and
c. when they deal with students who have been trained in how to generate adjunct question.

10:3 Present adjunct questions before instruction. under the following conditions

a. When they want to promote low levels of learning.
b. When they deal with students of tow ability.
c. When they deal with a content of specific information, and

d. When they want to attract students' attention and Increase their levels of motivation

10:4 Present adjunct questions during or after instruction under the following conditions

a. When they want to promote all levels of learning low, medium, and high,
b. When they deal with students of medium and high abilities,
c. When they dead with a content of general information and
d. When they want to check students understanding of what they have learned.

11- Provide learners with feedback after the latter have generated and answered their own questions or answered the questions they were given

Summary

This research paper tried to Introduce adjunct questions as cognitive strategy activators in terms of their instructional systems levels and positions hence, to propose a model for using adjunct questions Properly either by teachers or by instructional designers.

RECOMMENDATION

- Researchers are strongly recommended to conduct more studies on adjunct questions in the aim of specifying more conditions related to learner and content characteristics. and levels of learning

References

Ally M. 8 Szabo. M (1992). Effects of students generated vs. instructor provided spatial strategy learning from text Paper presented at the Annual Meeting of the Association for Educational Communications and Technology (AEC) Washington D C (fete 5 .Fe 9 1992)

Andre T (1979) Does answering higher level questions while reading facilitate productive learning' Review of Educational Research 49(2). 280 316

Andre. M. E. & Anderson T H (1987

1979) The development and evaluation of a self-questioning technique. Reading Research C; Quarterly 14(4) 605623

Andre T Muller C.. Womack S . Smid K . 8 Tuttle M (1980) Adjunct application questions facilitate later application or do they? Journal of Education Psychology 72(4) 533543

Anderson. R C.. & Biddle W B (1975) On asking people questions about what they are Reading In G Bower (Ed.) Psychology of Learning and Motivation Vol. 9 New York: Academic Press.

Annis L. F (1985) Students generated paragraph summaries and the information processing theory of prose learning Journal of Experimental Education 54(1) 410

Ausubel. D. P. (1960) The use of advance organisers in the learning and retention of meaning for verbal learning material Journal of Educational Psvcholoqv 51(5) 267272

Ausubel D P (1964) Some psychological aspects of the structure of knowledge. In S Elam (Ed): Educational and structure of knowledge U S A Rand McNally

Beentjes J. W.. 8 Vander Voot. T H ((952) Children s written accounts of televised and printed stories. ETR& D 39(3) a 526.

Blanchard ((1985)). what to tell and why? Journal of Reading (Dec.), 19 202.

Bloom B S (Ed.).(1956). Taxanomies of educational objective Handbook Cognitive Domain. NY. McKey

Bretzing. B H . Kulhavy R W & Catrino L C (587) Notetaking by Junior high students. Journals of Educational Research 80(6) 359362

Briggs. L. J. (1977) Instructions design Principles and application Englewood Clifs New Jersey Educational Technology Publication

Briggs. L J. 8 Wager W W (1981) HandbooK of procedures for the design of instruction (2nd ed). Englewood Clifs New Jersey Educational Technology Publication

Bruner J S (1960) The process of education New York Random House

Bull. B L & WittrocK. M C (1973) imagery in he learning of verbal definition British h journal of Educational Psychology 43(3) 289 293

Carrier C.Joseph.M R Krey C..&Lacroix P (1983a) Supplied Visual and imagery instruction independent and field dependent childrn s recall Educational Communication and Technology Journal 31(3). 153.160

Carner. C . Karbo K Kindem H Legisa. G. 8 Newstrom. L (1 1983b) Use of self Generated and supplied visual as mnemonics ,in gifted children's learning Perceptual and Motor Skills 57(1) 235.240

Cha. D & Dwyer F M (1991) Effect of visual and embedded rehearsal strategies in tacilrtating students achievement of different educational objectives Paper Presented at the Annual Meeting of the Association n for Educational Communication s and Technology ~ AECT) Orlano Florida (13.1.7.1991)

Chao. C I & Reigelutn. C M (1986) The effects of format and structure of a synthesizer on procedural decision learning. 10D&E Worklnq Paper No 22 Syracuse University Syracuse. NY. 132442340.

Crouse. J H & Idsteln P (~ 972) Effects of encoding cues on proselearnlng Journal of Educational Psyghology 63(4) 309313

Darwazeh A N (1982) Student generated versus teacher generated education questions: Their effects on remember and application level learning Dissertation Abstract international d7(07) 2281A (Jan .1983)

Darwazeh A N & Reigeluth C M (1982) Type and position of adjunct questions Their effects on memory end application IDD&E Working Paper No.7 Syracuse University Syracuse.NY 13244. 2340 ERIC Documents ED: 288517

Darwazeh A N. (1994a). Embedded vs specified and unspecified generative cognitive strategy

activators Their effects on memory and application levels learning An Najah Journal of Research (8) 296 238

Darwazeh. A N (1994b) under what conditions are embedded versus generative cognitive strategy activators effective Two prescriptive models for designing Instructions ERIC Document. ED. No. 373767

Dawazeh A. N. (1996). Examining conditions that embedded versus generative cognitive strategy activators are effective under: Cross cultural compansons. Bethlehem University Journal. vol. 1 5 Bethlehem West Bank

Darwazeh A N (1995) Procedures for curriculum design Documentation and Publication Center: An. Najah national University Nablus West Bank

Dean. T W . Searles. D . Singer. H . & Cowen. S ((1990 Learning concepts from biology text through fictional analogies and an anajogical study guide Journal of Educational Research 83(4) 233237

Dee Lucas D. & Di Vesta. F.J. (1980). Learner generated organizationalaids Effects on learning from tort. Journal of Educations Psychology 72(3) 304311.

DICK W.. 8 Carey, L, (1990) The systematic design of instruction (3ed). U.S.A. Scott, foresman and Company

Dinnel, D., & Glover J A (1985) Advance organizers Encoding manupulations. Journal of Educational Psychology' 77(5), 514521.

DiVesta. F. J., 8 Peverley, S T (1984). The effect of encoding variability processing activity, and rule example sequence on the transfer of conceptual rules. Journal of Educational Psychology, 76(1 1 108 119

Davey, B. 8 McBride, S (1986) Generating sel questions after reading A comprehension assist for elementary students Journal of Educational psychology 80(1) 43 46

Duell C K (1977) Overt acovert use of objectives of different levels Paper Presented at the Annual Meeting of the American Educational Research Association (New York. Ny, 1977)

Doctorow M., Wittrock M C., & Marks, C. B (1978) Generative processes In reading comprehension Nail Psychology 70(2). 1091 18

Dreher. M. J., 8 Garnbrell L. B. (1982). Trainig children to use a selt questioning strategy for studying expository prose. Paper presented at the Annual Meeting of the American Educational Research Association (Mar 1823 1982) New York NY

Essen, G V, & Hamaker C (~ 1990 using self generated drawings to solve arithmetic word problems. Journal of Educational Research, 83(6), 301 312

Felker, F. 8 Oapra, R A (1975) Effects of question type and position placements on problem solving ability from prose material Journal of Educational Psychology 67(3). 380 384

frase L T & Schwartz B H (1975) Effect of question production answering on prose recall Journal of Educational Psychology 67 628635

Frase, L T (1967) Learning from prose matenais Length of passage knowledge of results, and portions of Questions Journal of Educational Psyschology 67(3), 380 38

Gagne, R M., Briggs, L. J . & Wager, W W ((992) Principles of Instructional design (4th ea.) U S A. Holt, Rinehart 8 Winston

Hams, B. R (1992) The effects of Integrating a learning strategy In CBI Paper Presented at the Annual Meeting of the Association for Educations Communications and Technology (AECT), Washington, D.C.(Feb5 feb9,1992)

Helfeldt J. P & Lalik B (1975) Reciprocal student teacher questioning The Reading Research, 30 283 287

Holmes, 8. C. (1987) Children's inferences with print and Pictures Journal of Educations Psychology, 79(1), 1418.

Hooper, S., Sales. G., 8 Rysavy, D. (1992). Generative learning In small groups. Paper presented at the Association for Educational Communications and Technology (AECT)' Washington. D.C (Feb.5 Feb. 9, 1992).

Hudgins, B B . Dorman. J. 8 Hams. M (1979) Some effects of adjunct questions on intermediate grade children with different reading comprehension abilities Journal of Educational Research, 72(5). 25 265.

Idstein P (1972). Underlining versus repetitive reading. The Journal of Educational Research, 65(7), 321 323.

Jonassen, It). H., Hartley, J., & Trueman. M (1985). The effects of learner generated versus experimenter provided headings on Immediate and delayed recall and comprehension. ERIC Documents, ED: 25429

Jonassen. D H (1988). Integrating learning strategies into courseware to facilitate deeper precessing. In D. H donassen (Ed.), Instructional design for microcomputer courseware. Hillsdale, W. Lawrence Erilbaum Assciates.

Kiewra, K. A, 8 Frank, B. M (1988) Encoding and external storage effects of personal lecture notes, skeletal notes, and detailed notes for field independent and field dependent learners. Journal of Educational Research, 81(3). 143148

Kenny, R f (1992) The generative effects of instructional organizers with Computer Based Interactive Video Paper Presented at the Annual Meeting of the Association for Educational Communications and technology (AECT), Washington. D.C. (Feb 5 ·feb 9, 1992)

King, A (1991). Effects of training in strategic questioning on children's problem solving performance. Journal of Educational Psychology, 83(3), 307 3 7

Lambiotte J G. (1993). Knowlenge maps for open eased problem solving. Paper Presented at the Annuat Meeting of American Educational Research Association .Atlata. GA (April, 1993).

lampiotte J G . & Dansereau. D f (1992) effects of knowledge maps and prior knowledge on recall of science lecture content Journal of Experimental Education 60(3) 189201

Lenze. J. S. (1992). The effect of varied instructional strategies in facilitating subject's comprehension of spatial concepts Un oublished Doctoral Dissertation the Pennsylvania State University 1992.

Manzo A. V (1970) Improving reading comprehensions through reciprocal questioning. Dissertation Abstract International 30 5344A 5345A

Mayer R E. (1978). Advance organizers that compensate for the organization of test journal of educational psychology. 70(6) 880886

Mayer R E (1979). Can advance organizers influence meaningful learning Review of Educational Ressarch 49(2) 371·383.

Mayer R. E. (1992). Cognrtion and instruction: their historic meetin within educational psychology. Journal of Educational psychology 84(4) 405412.

McCagg E. C . & Dansereau D F (1991) A convergent paradig for examining knowledge mapping as a learning strategy. Journal of Educational Research 84 (6) 317324

McLean L . Ka' Yeh. N & Reiglutn C M (1983) The effects of format of synthesizer on conceptual learn,ng. IDD&E Working Paper No. 13. Syracuse University Syracuse. NY 132442340

Memory D M (1983). Main idea pre questions as adjunct aids with good and low average middle grade readers. Journal of Reading behavior 15(2) 3747

Merrill. M D (1983). The component display theory in C. M Reigeluth (Ed.). Instructional design theories and models An overview of their current status NJ Lewrence Erlbaum Associates.

Newby G J . 8 Stepich D A (1991) instructional analogies and the learning of tangible and intangible concepts Paper Presentec at the Annual Meeting of the Association for Educational Communications and Technology (AECT) Orlando. Fl. (February 1991).

Norman. D. A. & Lindsay P H (1977) Human information processing An introduction to psychology New York: Academic Press.

Owens. A M (1977) The effects of Question generation. question answering. and Reading on prose learning Dissertation Abstract International 37 5709A.5701A

Peper. R J . & Mayer R E (1986) Generative effects of note taking during science lectures Journal of Educational psychology 78(1) 34.38

Pratt D. (1980). Curriculum design and development NY Harcourt Brace jovanovich

Pressley G. M. (1976). Mental imagery helps eight years old remember what they read. Journal of Education Al Psychology 68(3) 355359.

Reigeluth C. M. (Ed.) (1983) instructional design theories and models An overview of their current status Hillsdale NJ; Lawrence Erilbaum Associates.

Reigeluth. C M . 8 Darwazeh A N (1982) The elaboration theories procedure for designing instruction A conceptual approach Journal of Instructional Development 5(3). 2232

Reigeluth C M. & Stein. f S (1983). The elaboration theory of instruction. In C M Reigeluth (Ed.). Instructional design theories and models. An overview of their current status Hliledale. NJ Lawrence Erilbaum Associates.

Rickards. J P (1976). Interactoin of postion and conceptual level of adjunct questions on Immediate and delayed retention of text Journal of Educational Psychology 68(2) 210 217

Rickards J. P 8 August G J (1975) Generative underlining strategies in prose recall. journal of Educational Psychology 67(6) 860

Rikards. J P . 8 DiVesta F J (1974) Type and frequency of questions in processing textual material. Journal of Educational Psychology 66 (3) 363 366

Rickaras.J P & Hatcher C W (1977 1978) interspersed meaningful learning semantic cues for poor comprehension Reading Research Quarterly 13(4) 538-553

Rigney j W (1978) Learning strategies A theoretical perspective in H F O' Neal (Ed). Learning strategies New York: Academic Press

Rigney J W &Lutz.K A (1976) Effect of graphic analogies of concepts in chemistry on learning and attitude .Journal of Educational Psychology 65(3). 305 311

Rothkopt E Z (1966) Learning from written instruction material An exploration of the control of inspection behavior by test like events American educational Research Journal 3(4) 241-249

Rothkopt E Z (1970) The concept of methemagenic activities Review of Educational Research 40(3). 325-336.

Rothkopt E Z 8 Bishicos. E E (1 967) Selective facilitative effects of interspersed questions on learning from written . Journal of Educational Psychology 5B(1) 56-61.

Sagana. S C . & DiVesta. F f (1 978) Learning expectation induced by adjunct questions and retrieval of intentional and incidental information Journal of Educational Psychology' 70(3). 280-288.

Sanders, J. R (1973) Retention effects of adjunct questions in written and aural discourse. Journal of Educational Psychology 56(2) 18 1 - 186

Shavelson, R J, Berliner. D C, Ravitch. M M . & Leeding, D ((1974) Effects of position and type of question on learning from prose material Interaction of treatments with individual difference Journal of Educational Psychology 66(1). 40 48

Seretny, M L., 8 Dean, R S. (1986). Interspersed post passage questions and reading comprehension achievment. journal of Educational PsYchology, 78(3), 228 229

Shrager. L.. & Mayer, R. (1989) Notetaking fosters generative learning strategies in novices. Journal of Educational Psychology, 81(2). 263 264

Simbo, F K. (1988). The effects of notetaking approach on student achievement in secondary school geography Journal of Educational Research, 81(6), 377 381

Spurlin. J E.. Dansereau, D F . O'Donnell. A & Brocks. L W (1988) Text processing Effects of summarization frequency on text recall The Journal of ExperimentaL Education, 56(4), 199-202.

West, C'K . Farmer, J A . & Wolff P M (1991) instructional design Implications Cognitive science MA allyn and Bacon

Watts, G. h & Anderson, R C (1971) Effects of three types of inserted questions on learning from prose Journal fo Educational psychology 62(5), 387 394

Weinstern C. E. (1978) Elaboration Skills as a learning strategy In H F O'neil (Ed) learning Strategies New York: Academic Press.

Wittrock M C. (1974a). Learning as a generative Process. Educational Psychologist, 11(2). 87-95.

Wittrock M C (1974b) A generative model of mathematics educaction Journal for Research in Mathematics Education 5(4). 1 81 -1 96

Wittrock M C, & Carter .J (1975) Generative processing of hierarchically organized words. American journal of psychology 88(33), 489 50 0

Wittrock, M C (1992). Generative learning processes of the brain Educations Psychologists 27(4), 531 541

Wittrock M C,. & Alesandrin K. (1990) Generation of summaries and analogies and analytic and holistic abilities. American Educational Research Journal, 27(3), 489 502.

Wittrock M C. (1991) Generative teaching of comprehension The Elementary School Journal 92 (2), 169 184

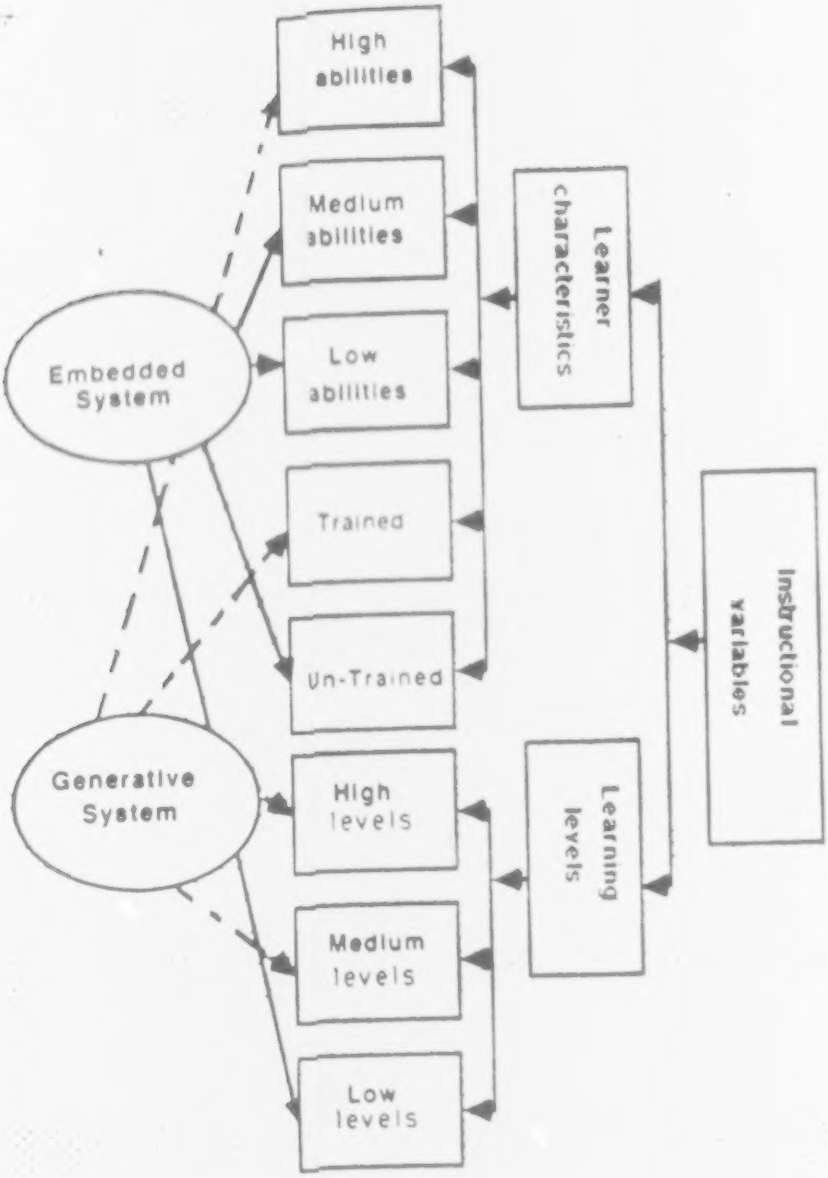
High abilities
Medium abilities
Low abilities
Trained
Un-Trained
High levels
Medium levels
Low levels
Embedded System
Generative System
Learner characteristics
Learning levels
Instructional variables

Figure (1)
Conditions for using Embedded versus Generative Gognitive Strategy Activators by Using Adjunct Questions

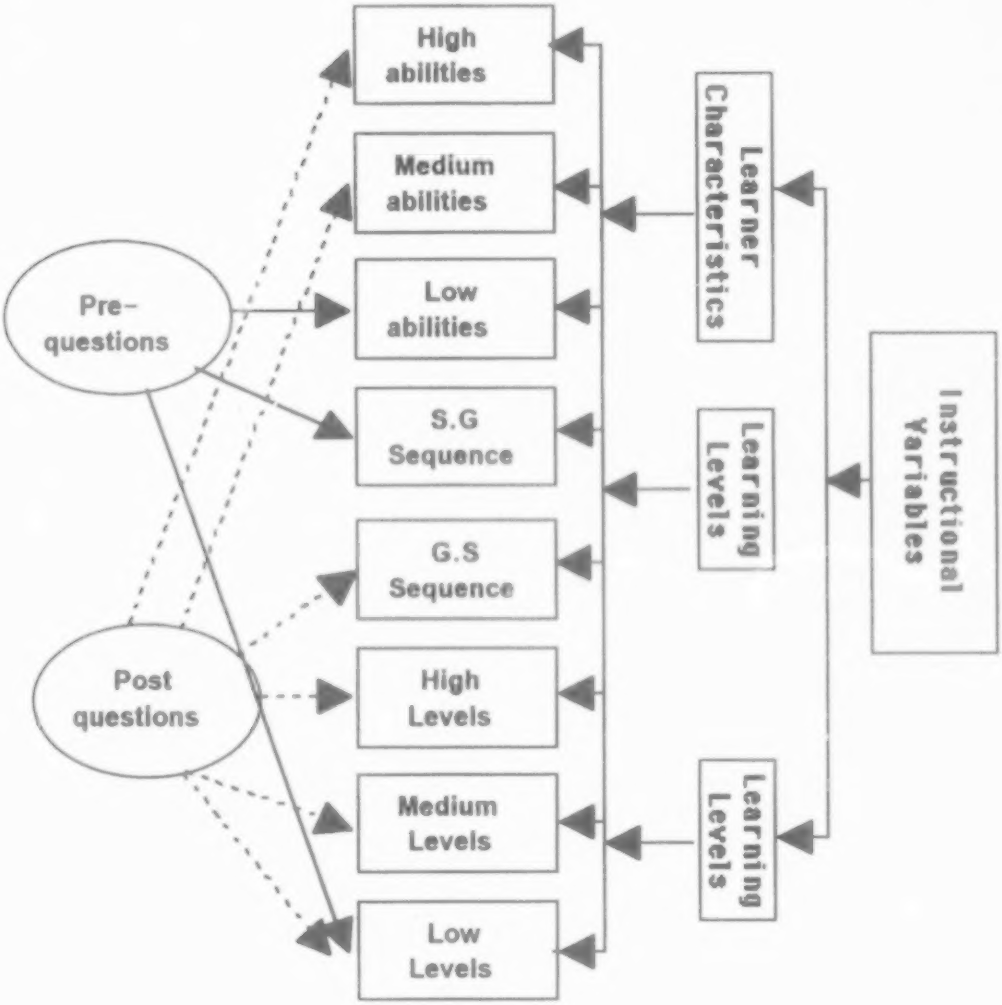
High abilities
Medium abilities
Low abilities
S.G Sequence
G.S Sequence
High Levels
Medium Levels
Low Levels
Pre-questions
Post questions
Learner Characteristics
Learning Levels
Learning Levels
Instructional Variables

Figure (2)
Conditions for using Pre-versus Post-questions

ENHANCING TEACHERS' PERFORMANCE THROUGH PRACTICING THE INSTRUCTIONAL DESIGNER COMPETENCIES

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INTRODUCTION

Traditionally, educators have determined the major elements of the instructional process to be students, teachers, and curriculum. Since 1970, however, rapid technological advances have necessitated bringing the instructional designer into the core of the instructional process (e.g.,Darwazeh, 1995a; Darwazeh, Branch, & El-Hindi, 1991; Reigeluth, 1983; Dick & Carey, 1990, Gagne, Briggs, & Wager, 1992) (See Figure 1).

The science of instructional design is defined as a discipline concerned with decision making and developing instruction through processes of selection, analysis, sequencing, implementation, management, and evaluation (Darwazeh, 1995b; Darwazeh, Branch, & El-Hindi, 1991; Reigeluth, 1983). The instructional designer, accordingly, is defined as one who understands and practices the instructional design science's activities in order to accomplish a specified purpose under a certain condition (Martin, 1984; Reigeluth, 1983).

Educators believe that the technological changes in teacher preparation and vocational development programs have emphasized the implementation of the principles of instructional design as a vehicle for improving teachers' performance (e.g., Branch, Darwazeh, & El-Hindi, 1992; Branch, 1993; Darwazeh, 1995; Reiser & Mory, 1991).

The assumption behind their believes is that, practicing instructional designer competencies (IDC) by teachers during their planning routine would have a great influence on the quality of their professional performance, hence, on the level of their students' academic achievement (Martin, 1990; Darwazeh, 1995b; Wilkerson & Scheffler, 1992) (See Figure 2). Additionally, practicing instructional designer competencies will be effective in terms of saving time, effort, and money.

The rationale for this assumption is that classroom teachers, normally, do engage in many instructional design practices when they plan for teaching, but without knowing of that engagement. In fact, teachers and instructional designers are sharing similar basic activities while designing instructions such as, selecting, planning, designing lesson plans, designing unit plans, designing test items, stating objectives, developing, implementing, managing, evaluating, and consulting. The major difference between the two of them is that instructional designers focus on selecting instructional materials, analyzing content, sequencing content, managing instruction, and decision-making; whereas teachers primarily focus on teaching and evaluating.

Yet, someone may wonder and ask: "Do these practices classify teachers as instructional designers?" If the answer is yes, "Does practicing instructional designer competencies have a positive effect on enhancing teachers' performances and their students' academic achievement?" And if the answer is no, "What kind of competencies do teachers need in order to classify them as instructional designers?"

Therefore, the **purposes** of this research are: 1) to briefly review the previous research on teachers who have practiced (IDC) compared with teachers who have not practiced such competencies, and 2) to specify instructional designer competencies that the teacher needs during his/her planning routines.

Review of previous studies

Darwazeh (Darwazeh, 1995b) have reviewed a good number of studies that have been conducted to investigate the relationship between teacher planning routines and instructional designer competencies. For example, Martin (Martin, 1990) has compared between teachers who had a knowledge or a kind of training in instructional design skills, and teachers who did not have such knowledge or skills. She took two groups of teachers: One group consisted of five teachers who have a formal educational background in instructional systems design (ISD), and the other group consisted of five teachers who did not have such background. An open and closed item questionnaire was sent to each subject and follow-up interviews were conducted. Teachers were asked about their general planning practices, written planning procedures, mental planning procedures, and how they implement instruction based on their plans.

Results indicated that nine of the ten teachers used general ISD skills in planning. Teachers reported that they analyze learners' needs and abilities, and use objectives to guide the instructional process, specially for selecting learning activities and evaluations. Martin also found that the teachers with ISD were more specific in their responses about the use of instructional design for some aspects of planning, such as, using hierarchies and taxonomies to sequence instruction, checking the consistency among objectives, learning activities and evaluation. In addition, she found that four of the five ISD teachers believed that knowledge of ISD has improved both their planning processes, and their teaching.

Reiser and Mory (1991) have reached similar results when they conducted a study to examine the extent that the systematic planning techniques (SPT) were incorporated into the written and mental teachers' planning practices. They took two experienced teachers: one had received a formal training in the use of those techniques, and the other one had not received such training. A questionnaire was administered to the teachers and they were interviewed and observed as they went about planning and implementing an instructional unit.

Results indicated that the teacher who had been trained to use (SPT) did employ them, whereas the untrained teacher just adhered to the principle that instructional activities should be planned with objectives clearly in mind. "Reiser and Mory " also found that the trained teacher focused on a written plan as well as on a mental one, whereas the untrained teacher focused on a mental plan only. The trained teacher also put emphasis on the consistency between the objectives and the activities she used during teaching. In addition, the trained teacher spent more time in implementing the written plan than the untrained teacher.

Branch, Darwazeh, & El-Hindi (1992) sustained the above results in some aspects. They found that classroom teachers' planning activities correlate with the practices of instructional design professionals. Sixty-one public school teachers from the northeast United States, and a 35-item, two- part questionnaire were used for the purpose of their study.

By taking pre-service teachers, Earle (1991, 1992) identified graduates (1980-1990) from University of North Carolina at Wilmington (UNCW) who graduated from pre-service teacher program, and asked them to respond to a four-part survey which covered demographics, general information, yearly planning, unit planning, and daily planning. The results of his survey were as follows:

a) 81% of teachers felt that a knowledge of Instructional Design (ID) processes had improved their planning.
b) The crucial elements of the ID process were goals, learner analysis, objectives, tests, activities, strategies, and revision of instruction. Some other elements were considered helpful, if time allowed, such as: task analysis, classification of learning, instructional plans, and tried-out instructions.
c) Although teachers regarded mental and written planning forms as almost equal in importance at the yearly, unitary, and daily levels, they favored mental planning form overall.
d) Teachers in their planning types deviated more from yearly plans and less from unit and daily plans.
e) 52.6% of teachers do plan for their instruction formally, whereas 47.4% do plan informally.

Klein (1991) also conducted a study on pre-service teachers to examine their success in acquiring and applying principles of learning and instructional design. 105 teachers enrolled in a professional teacher preparation program were taken for this purpose. They were taught the essentials of learning and competency-based-instruction, and were required to plan a lesson using these concepts.

"Klein" found that most of the pre-service teachers, regardless of their specialization, were successful in acquiring and using the principles of learning and instructional design.

Recently, Branch (1993, 1994) tried to specify which practices teachers do more while they plan teaching, and which ones they do least. The general results of his studies were that, secondary school teachers tend to engage in some systematic instructional design practices but are selective in the practices they routinely employ. While there is a correlation between teachers' planned activities and instructional design practices, there are several instructional design practices still beyond the realm of teachers manipulation. The most important practices to all teachers were: determining course goals, breaking down curriculum goals into learning tasks, organizing the content of each lesson around central themes, and making sure the lesson fits within the entire curriculum. Whereas the least important practices to teachers were: discussing lesson plans with others, establishing media selection criteria, soliciting input from subject matter experts, and coordinating cooperative efforts among other teachers.

Darwazeh (1995b) have also conducted a study similar to Branch's. She used a random sample of 37 Palestinian government in-service school teachers and gave them a training of 18 hours in instructional designer competencies based on "Dick and Carey's model" (Dick, & Carey, 1990). The results of her study were the following: 1) teachers planning routine was enhanced significantly (& =.0007) after receiving the training, 2) teachers practiced significantly the design and analysis skills more than the implementation, management, and evaluation ones, 3) teachers practiced significantly the daily and yearly planning more than the monthly and seasonally ones, 4) teachers plan significantly in a written form more than in a mental form, 5) the planning skills which had been practiced 90% or more were as follows:

a- Develop a time line for accomplishing the course goals.

b- Prepare records that document students' progress, achievement attendance, or special needs.
c- Analyze the learning task in order to identify the primary and secondary content that they plan to teach.
a- Develop an instructional management plan to make sure that events take place as they were planned.
e- Design an evaluation plan to determine students' strengths and weaknesses in mastering the performance objectives.

Whereas, the planning skills that had been practiced 10% or less were as follows:

a- Analyze student history and characteristics.
b- Select the media that are relevant to implementing the course.
c- Consult with resources, specialists, administrators, supervisors, content experts, or people from business and industry, while they plan for the course.
d- Coordinate activities and events with school administrators, other teachers, or parents to manage or run the course smoothly.

In addition, "Darwazeh" found that the training session has enhanced teacher's planning routine, and their student's academic achievement as well. The correlation between teachers' scores on a questionnaire which covered the competencies of the instructional designer, and their students' scores on a 15 item achievement test measured rememberance and application levels of learning, was raised significantly (&= .001) from (r=.09) before training to (r=.513) after training.

CONCLUSION

From the above studies, we clearly conclude that giving teachers some training, knowledge, or courses on instructional design principles would enhance the quality of their teaching plus the academic achievement of their students.

This conclusion forced us to raise this question: "What kind of instructional designer competencies do teachers exactly need during their teaching planning routine?" To address this question, we have to tackle the second purpose of the current research. It is to specify the instructional designer competencies that the teachers need during their planning routine. We are going to use teachers jargon rather instructional designer one.

Instructional Designer Competencies For Teachers

As we mentioned earlier, the competencies of instructional designer are derived from the principles of the science of instructional design. The science of instructional design has been considered to consist of five major domains: 1) instructional analysis, 2) instructional design and sequence, 3) instructional development and implementation, 4) instructional management, and 5) instructional evaluation. Thus, the instructional designer competencies are those activities that each domain of instructional design consists of (Reigeluth, 1983).

Dick and Carey (Dick & Carey, 1990) have looked at the science of instructional design as a kind of systematic approach of instruction. This approach, from their points of view, consists of ten major steps which reflect the activities (or competencies) of the instructional designer . They are: 1) identifying instructional goals, 2) conducting instructional analysis, 3) identifying entry behaviors characteristics, 4) writing performance objectives, 5) developing criterion-referenced test items, 6) developing instructional strategies, 7) developing and selecting instructional materials, 8) designing and conducting formative evaluation, 9) designing and conducting summative evaluation, and 10) revising instruction (See Figure 3).

Darwazeh, Branch, and El-Hindi (1991) were not satisfied with the above specifications of instructional designer competencies. They tried to break down the "Reigeluth, or Dick & Carey's models" and others into more detailed activities. They conducted a content analysis of the most recent procedures of instructional design models such as: Andrews & Goodson, (1980); Briggs & Wager (1981); Darwazeh, (1986); Dick & Carey (1990); Gagne, Briggs, & Wager (1988); Merrill (1983); Merrill, Reigeluth, & Faust (1979); Merrill & Tennyson (1977); Pratt, (1980); and Reigeluth & Stein, (1983). Concurrently, Branch, (1986); Earle, (1985); and Yinger (1979), analyzed the activities engaged in by the teacher during his/her everyday teaching routines.

Both analyses served as the design basis for the two instruments which are utilized in Darwazeh, Branch, & El-Hindi's project (1991), the Instructional Designer Competencies (IDC), and the Teacher Planning Inventory (TPI). The IDC and the TPI are identical in content, however, the language is significantly different. While the TPI uses the content of the IDC, it is presented in the language most familiar to practicing classroom teachers.

Recently, Darwazeh (1995b) worked on the IDC and TPI intensively , and came up with more specified and accurate activities that both the instructional designer and teacher are involved in when they design instructions. She, accordingly has put a questionnaire of instructional designer competencies to be used by classroom teachers only. The items of the questionnaire were classified within the realm of the instructional design domains: 1) Analysis, 2) Design or Sequences, 3) Development and Implementation, 4) Management, and 5) Evaluation.

In the domain of **analysis**, teachers were asked to be engaged in analyzing activities such as: analyzing a classroom environment, determining its constraints and facilities, determining the educational goals, describing students' learning ability, social economic class, academic aptitude etc., conducting content analysis, determining behavioral objectives, and identifying learning prerequisites etc.

In the domain of **design** (or sequence), teachers were asked to be engaged in designing activities such as: sequencing educational and behavioral objectives hierarchically, identifying relationship among topics, match educational goals to performance objectives; match instructional strategies to performance objectives; match performance objectives and instructional strategies to lessons content; match performance objectives, instructional strategies, and lessons content to test items etc.

In the domain of development and **implementation**, teachers were asked to be engaged in teaching activities such as: selecting or developing primary teaching strategies; selecting or developing alternative teaching strategies; determining cognitive strategies for supporting student learning such as organizers, questions, note-taking etc.; selecting strategies for recognizing individual differences, for motivating students learning, and for dealing with student who are above or below average; identifying available and potential resources relevant to a planned instructional episode such as textbook, periodicals other important references; selecting relevant media etc.

In the domain of **management**, teachers were asked to engage in managing activities such as: outlining a time line for accomplishing the lessons objectives; coordinating with school's principal, superintendents, administrators, teachers and parents when necessary; consulting with the appropriate specialists, supervisors, subject matter experts, business and industry groups, educational organization, educational technology experts when necessary; planning for classroom management; planning for dealing with disruptive behavior in the classroom; keeping records of students' progress, achievement, attendance, special needs etc.

And in the domain of **evaluation**, teachers were asked to be engaged in evaluating activities such as: developing achievement tests; developing a plan for formative evaluation; developing a plan for remedial instruction or enrichment activities; developing a plan for summative evaluation etc. (See Appendix 1 for more details)

CONCLUSION

From the above theoretical background, we can conclude that the instructional designer competencies are derived from the instructional design activities, and these activities should cover mainly five major domains of instructional design: instructional analysis, design or sequence, development and implementation, management, and evaluation.

It is also important to note that practicing instructional designer competencies should be done in an organized and **systematic** way. The models of instructional design, especially the "Dick and Carey's model", are the best to be followed for this purpose. Thus, it is not enough for our teachers to get involved in instructional design activities, but they also should follow a certain instructional design model in order to plan for teaching systematically.

Summary

This paper tried to shed light on the importance of practicing instructional designer competencies for enhancing teachers' performance and their students' academic achievement. Thus, this paper tried to answer two questions. The first question is: "Does practicing IDC by school teachers have a positive effect on their professional performance, hence on their students' academic achievement?" This question was answered by presenting a sample of pervious studies which showed this positive effect. The second question is: "What kind of instructional designer competencies do school teachers need during their planning routine?" This question was answered by presenting "Darwazeh's Questionnaire" of IDC which was developed in 1995 based on a content analysis of the most recent procedures of instructional design models.

RECOMMENDATION

The major recommendation of this paper is that people who are in charge are strongly recommended to implement the enclosed questionnaire of IDC in pre and in-service teacher preparation and vocational development programs, because, this implementation will lead for enhancing teachers' professional performances, and their students' academic achievement as previous studies have shown.

REFERENCES

Andrews, D. H., & Goodson, L. A. (1980). A comparative analysis of models of instructional design. Journal of Instructional Development, 3(4), 2-11.

Branch, R. C., Darwazeh, A. N., & El-Hindi, A. E. (1992). Instructional design practices and teacher planning routines. Paper presented at the Annual Meeting of the Association for Educational Communications and Technology (Washington, DC., Feb. 5-9, 1992). ERIC Documents, ED No. 347-976.

Branch, R. C. (1993). Instructional design practices for junior high and senior high school teachers. Paper presented at the Annual Meeting of the Association for Educational Communications and Technology (New Orleans, Louisiana, Jan. 13-17, 1993).

Branch, R. C. (1986). Teachers as instructional designers. Unpublished manuscript. Virginia Polytechnic Institute and State University, Self Instructional Curriculum Lab, Blacks burg, New York.

Branch, R. C. (1994). Common instructional design practices employed by secondary school teachers. Educational Technology, 34(3), 25-34.

Briggs, L., & Wager, W. W. (1981). Handbook of procedures for the design of instruction (2nd ed.). Englewood Cliffs, New Jersey: Educational Technology Publication.

Darwazeh, A. N., Branch, R. C., & El-Hindi, A. E.(1991). The influence of instructional designer competencies on teacher planning routines. Paper presented at the Annual Meeting of the Association for Educational Communications and Technology, (Feb. 13-17, 1991. Orlando, Florida).

Darwazeh, A. N. (1986). Curriculum design (1st ed.). Documentary and Research Center at An-Najah National University, Nablus, Palestine. In Arabic Language.

Darwazeh, A. N. (1995a). Curriculum design (2nd ed.). Documentary and Research Center at An-Najah National University, Nablus, Palestine. In Arabic Language.

Darwazeh, A. N. (1995b). Under what conditions are embedded versus generative cognitive strategy activators effective: Two prescriptive models for designing instructions. Paper presented at the Annual Meeting of the Association for Educational Communications and Technology, (Feb. 8-12, 1995. Anaheim, California). ERIC Document, ED No: 373-767.

Dick, W., & Carey, L. (1990). The systematic design of instruction (3rd ed.). U.S.A., Scott, Foresman & Company.

Earle, R. S. (1985). Teachers as instructional developers. Educational Technology, August, 15-18.

Earle, R. S. (1991). The effects of instructional design on teacher planning processes. Paper presented at the Annual Meeting of the Association for Educational Communications and Technology. (Orlando, Florida, Feb. 13-17, 1991).

Earle, R. S. (1992). The use of instructional design skills in the mental and written planning processes of teachers. Paper presented at the Annual Meeting of the Association for Educational Communications and Technology, Washington, D.C. (February, 1992).

Gagne, R. M., Briggs, L. J., & Wager, W. W. (1988). Principles of instructional design (3rd ed.). New York: Holt, Rinehart, & Winston.

Gagne, R. M., Briggs, L. J., & Wager, W. W. (1992). Principles of instructional design (4th ed.). New York: Holt, Rinehart, & Winston.

Klein, J. D. (1991). Pre-service teacher use of learning and instructional design principles. Educational Technology Research and Development, 39(3), 83-89.

Martin, B. L. (1990). Teachers' planning processes: Does ISD make a difference? Performance Improvement Quarterly, 3(4), 53-73.

Merrill, M. D. (1983). The component display theory. In C. M. Reigeluth (Ed.). Instructional design theories and models: An overview of their current status. New Jersey: Lawrence, Erlbaum Associates.

Merrill, M. D., Reigeluth, C. M., & Faust, G. W. (1979). The instructional quality profile: A curriculum evaluation and design tool. In H. F. O'Nill, Jr. (ed.). Procedures for instructional systems development. New York: Academic Press.

Merrill, M. D., & Tennyson, R. D. (1977). Teaching concepts: An instructional design guide. New Jersey: Educational Technology Publications.

Pratt, D. (1980). Curriculum design and development. New York: Harcourt, Brace, Jovanovich.

Reigeluth, C. M. , & Stein, F. S(1983). Instructional design: What is it and why is it. In C. M. Reigeluth (Ed.). Instructional design theories and models: An overview of their current status. New Jersey: Lawrence, Erlbaum Associates.

Reiser, R. A., & Mory, E. H. (1991). An examination of the systematic planning techniques of two experienced teachers. Educational Technology Research and Development, 39(3), 71-82.

Wilkerson, T., & Scheffler, A. J. (1992). Examining an assumption of linkage between lesson planning and implementation. Education, 113(1), 74-79.

Yinger, R. (1979). Routines in teacher planning. Theory Into Practice, 18(3), 163-169.

A SPECIFICATION FOR AN INFORMATION SYSTEMIC DATA-STRUCTURE TO DEFINE AND QUANTIFY ETHICS IN COURSE DESIGN: A COMPUTER-INTEGRATED QUALITY-BASED APPROACH TO ENHANCE TEACHER EDUCATION AND SCHOOL REFORM

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INTRODUCTION

In order to design and/or understand a planned activity, it always helps if the structure of the associated goal, of which the planned activity is a component or a sub-component, is known or defined beforehand. This research report addresses the sub-component, "the role of assessment and student support" of the structured-goal of the theme of the 1996 World Assembly of the ICET, "Teacher Education and School Reform" [2], whose tabular structure is given in Table-1. However, the idea of "School Reform" is not an isolated concept specific to the activity of only ICET, it also is a widespread activity that enjoys a very high priority in the minds of teachers, educational research workers, and educational administrators at all levels of education in the United States of America (U.S.A.). For example, in the Fall of 1996, the National Science Foundation (NSF) published a report [3] on the review of undergraduate education in Science, Mathematics, Engineering, and Technology. This report is the outcome of a year-long intensive and comprehensive investigation conducted by a sub-committee of the Advisory Committee of the Directorate for Education and Human Resources (ACEHR) of NSF, and includes contributions from almost one hundred organizations and hundreds of individuals. In this report, the ACEHR recommended not only to NSF but also to "all mission-oriented Federal Agencies, business and industry, academic institutions and their faculties and administrators, professional societies, private sector organizations, state and local governments, and to other stakeholders in undergraduate education" [4], on how to shape America's future through improved undergraduate education in Science, Mathematics, Engineering, and Technology.

Table (1)
Structured-Goal of the Theme "Teacher Education and School Reform"

1. Enhancing Values	2. Fostering Partnerships	3. Preparing Teachers	4. Capitalizing on International Collaboration
1a. Promoting democratic values 1b. promoting democratic pedagogy of school renewal 1c. building a school community 1d. orienting school personnel towards planned change 1e. enhancing teaching and learning effectiveness	2a. Partnership between schools and universities 2b. within professional development schools 2c. between professional and public schools 2d. between centers of educational development and public schools	3a. innovation in pre-service and in-service teacher education 3b. role of commitment, empowerment, and reflection 3c. role of assessment, and student support	4a. networking and collaboration of regional efforts 4b. networking and collaboration of national efforts 4c. networking and collaboration of international efforts

For the teachers of Science, Mathematics, Engineering, and Technology, the ACEHR made a set of recommendations which may be summarised as follows:

(i) Believe and affirm that every student can learn, and model good practices;
(ii) Start with the student's experience, but have high expectations within a supportive climate;
(iii) Build enquiry, a sense of wonder and the excitement of discovery; and,
(iv) Build communication and teamwork, critical thinking, and life-long learning skills learning experiences.

Although the item #(ii) in this summary is actually the topic that is very similar to the topic that this paper is trying to address, this NSF document [3] does not suggest any systematic guideline on how to implement it.

School reform through knowledge of best teaching methods has been in the minds of school principals also For example, in Spring of 1993, Los Angels Educational Alliance to Restructure Now (LEARN) initiated and introduced a "Skills Profile" for principalship in the twenty first century [5]. By November of 1996, over fifty school principals have accepted this "Skills Profile" to construct a meaningful professional

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development model and peer assessment tool for the school principals. This "Skills Profile" includes eleven items and four of them are the following:

(i) Knowledge of best teaching methods;

(ii) Technology literacy;

(iii) Teaching communication; and

(iv) Total Quality Management (TQM) principles.

However, this report [5] does not include any suggestion on how to best combine the TQM principles with the knowledge of best teaching methods.

Educators, on the other hand, are actively pursuing various methods to include TQM and technology to design and implement improved teaching methods. Proponents of the use of TQM in education believe that the teaching and learning process can be improved by applying the teachings of Dr. Edwards Demming (the father of modern TQM) in school environment [6, 7, 8], and they do emphasize the following:

(i) The existence of a difference between boss-teachers and lead-teachers. Boss-teachers fail to understand that a student's motivation comes from within herself or himself, not from out- side [7];

(ii) The fact that students feel more comfortable and less bored when they work in-groups;

(iii) The fact that students learn more through interactions, activities, and particularly, through discovery learning; and,

(iv) The belief that students participate more in the learning process with more enthusiasm if they get more power in the decision making process that are related to the course design and delivery of instruction.

However, the proponents of TQM, so far, have failed to take into account the fact that students (for that matter, all human beings) learn by interpreting new information in terms of their already existing knowledge. In other words, the nature and level of pre-existing knowledge plays a major role in the learning process (let us call it the Human Factor of Learning, or simply HFL). It is probably true that through discovery learning, through group activities, and through interactions, students get more control over their learning process and they learn more, and probably it helps the to get motivation from inside, but it is probably also true that if HFL could be positively included in all these techniques, learning could be significantly improved and that could provide more meaningful help to the students to get more motivation from inside.

Educators, who are proponents of "Technology", believe that using computers and multimedia technology as teaching tools can revolutionize the teaching process. In fact, the use of technology is viewed mostly as a tool that can be used to enhance group interactions, individual and group academic activities, and discovery learning, and that can be used to implement distance education through internet [9]. However, the proponents of technology also have failed to take into account the influence of HFL in the learning process. That is why many times we might see that teaching using chalk &

blackboard (plus HFL to some extent, in an implicit way) produces better learning and self-motivation than technology-based teaching (minus the HFL).

My understanding of the teaching process have convinced me that the topic, "the role of assessment and student support", that this research report attempts to address, actually should be based totally on a scientific understanding of the power of HFL. Since including HFL in a course design is an ethical issue, we called our research topic "Ethics in Course Design", and to construct such a design we have followed a method [1] that has been shown to be successful in designing the structure of written documents (a communication tool).

In the rest of this report, we will first define a structure for "Ethics in Course Design", then we will suggest a way to quantify ethics in course design, so that this measurement techniques can be used to estimate the quality of ethics in a course design, and finally, we will present a specification for an information systemic data-structure to record the ethical content of a course design with the hope that this data-structure can be taught to teachers thereby enhancing the teacher education and school reform.

A STRUCTURE FOR ETHICS IN COURSE DESIGN

The word "ethics s" in general, means the code of morals [10] of a particular profession, group, or an individual, and the word "moral" means [10] dealing with right and wrong in con- duct. On the basis of our previous discussions, we may conclude that a definition of "Ethics in Course Design" must include within its boundary a right method of dealing with the human factor problem that is related with the premise that the nature and level of pre-existing knowledge plays a major role in the learning process. Here, we will describe a method for doing that using the structured-goal concept.

Any goal can be defined in two ways: using an abstract-goal method, and/or using a structured-goal method. For example, the statement "I want to have a good dinner ", uses an abstract-goal definition of dinner, whereas the statement "I want to have dinner with fried chicken, cole slaw, and coffee with cream", uses a structured goal definition of dinner. In order to construct a structured-goal definition of a course design, let us assume that we are designing a course for a sixteen-week semester. Also, let us assume that we have found a way to divide the course materials into five modules (modules M1, M2, M3, M4, and M5, and approximately three weeks per module). Now let us ask ourselves the question: what are tie properties that the subject materials of the five modules M1, M2, M3, M4, and M5 must have in order for the course design to include HFL? Since HFL asserts that new learning is significantly influenced by preexisting knowledge, we may conclude that for the course design to be HFL-based, the materials of the five modules must have the following properties:

Property #1: The Intra-Module Property:

Intra-module topics should be ideally parallel to each other. In other words, topics within each module should have zero dependence on each other.

Property #2: The Inter-Module Property:

Inter-module topics must show 100% compatibility for forward relationship. That means, topics in module M1 should display maximum dependence on the topics that are specified as the prerequisite materials (let us assume that the prerequisite materials belong to a module called M0’ topics in module M_2 should display maximum dependence on topics of modules M_0 and M1, topics in module M_3 should display maximum dependence on the topics of modules M_0 M_1, and M_2, and following in this way, topics in module M_5 should display maximum dependence on topics of modules M_o, M_1, M_2, M_3, and M_4.

The reason for Property #1 is that, in order for a new knowledge to become a pre-existing knowledge, the new knowledge is required to go through a "threshold time" in the mind of the learner. Ideally speaking, the duration of one module should be twice the length of the "threshold time".

The reason for Property #2 is that, within the duration of the semester, this is the only way to take advantage of the HFL. However, there is no guaranty that our assumption about the length of the "threshold time" will match with the three-week (or any length of time used by the teacher) duration of a module. For some students, this time frame will work well, for others it will not work well. Besides, there will be other students whose background about the materials of the module Mo would be very poor from the beginning.

Obviously, then, HFL will generate two types of effects on the students: the coherent effect, and the incoherent effect. The coherent effect will help the students to learn faster and will be enjoyed by those students who will understand the materials of module M while attending module M1, will have good grasp of the materials of modules Mo and M1 while attending the module M2, and so on. The incoherent effect will delay the learning process of the students and will affect those students who will not have a good understanding of the materials of module Mo while attending module M1, will not have a good understanding of the materials of modules Mo and M1 while attending module M2, and so on. To minimize the presence of the incoherent effect of the HFL, there is a need for a feedback process whose structure and time-sequence is described below.

Structure and Time-Sequence of the Feedback Process:

The students must be tested once just before the beginning of module M_1 (let us call the test T_0)' once just after the module M_1 (let us call this test T1), once just after the module M2 (let us call it T_2), once after the module M_3 (and we will call it T_3), and once just after the module M_4 (we will call it T_4). Although not required for the feedback process, a test must be given also after the module M5 (we name it T_5). Assuming that each of Mo, M1, M_2, M_3, M_4, and M5 has (n+1) items, we can use pij to represent the j-th item in the i-th module (i=0,1,2,3,4 and 5; j=0,1,2,3,...,n). Obviously, then, poj (j=0,1,2,3,...,n) will form the materials for the test To, P_{1j} (j=0,1,2,3,...,n) will form the materials for the test T_1, and so on. After each test, students must be grouped into at least three categories: group-one (good), group-two (average), and group-three (below average). In order to get the positive benefit of HFL, it would be essential to design and prepare beforehand the necessary activity materials that would be used to implement the feedback step which essentially would be partly hands-on and mostly group projects. Group-one students will get advanced group projects, group-two students will get less advanced group projects, and group-three students will get average-level group projects. Feedback activity must be conducted before starting the next module of the course.

Now, by combining the intra-module property, inter-module property, and the structure and time sequence of the feedback process, the complete structure of the "Ethics in Course Design" may be defined as follows:

Ethics in Course Design
= HFL-Based Structured-Goal of the Course-Design
= $T_0(P_{0j}) + (\text{FB-ONE}_0 + \text{FB-TWO}_0 + \text{FB-THREE}_0) + M1$
$+ T1(P_{1j}) + (\text{FB-ONE}_1 + \text{FB-TWO}_1 + \text{FB-THREE}_1 + M_2$
$+ T2(p_{2j}) + (\text{FB-ONE}_2 + \text{FB-TWO}_2 + \text{FB-THREE}_2) + M_3$
$+ T3(p_{3j}) + (\text{FB-ONE}_3 + \text{FB-TWO}_3 + \text{FB-THREE}_3) + M_4$
$+ T4(p_{4j}) + (\text{FB-ONE}_4 + \text{FB-TWO}_4 + \text{FB-THREE}_4) + M_5$
$+ T5(p_{5j}) + (\text{FB-ONE}_5 + \text{FB-TWO}_5 + \text{FB-THREE}_5)$
where FB-ONE_n, FB-TWO_n, and FB-THREE_n are the feedback activities of group-one, group-two, and group-three, respectively, after the test T_n.

A METHOD TO QUANTIFY ETHICS IN COURSE

The structured-goal definition of an object or goal actually is nothing but a conceptual transformation of the object or goal according to some assumptions or rules. This structured-goal definition may also be called the abstract specification for the conceptually transformed object or goal. When those transformations are achieved by following some rule of ethics, we get an abstract specification for the ethical structure of the object or goal. The advantage of this structured-goal definition of ethics is that it provides a way to measure the ethical content of a real life object that has been constructed by following its structured-goal definition (i.e. the abstract specification) that was achieved through a conceptual transformation by following the relevant rule of ethics. In our case, our object was "Course Design" and our ethical rule was HFL. Using that ethical rule, we have transformed "Course Design" into "Ethics in Course Design" which is actually HFL-based structured-goal of the "Course Design", and the complete structure of the abstract specification of this "Ethics in Course Design" has been presented at the end of the previous section. Now, following this definition of the abstract specification, if we generate a design for a course and if we want to measure the ethical content of this designed course, we need to follow an algorithm which must be based on the definition of the abstract specification. Assuming that in each module we have four topics, (in other words, we have Pi. with i=0,1,2,3,4, and 5, and j=0,1,2, and 3), the algorithm will measure the following:

(i) Inter-Module Property:
Each Pij, with i >= 1, must depend conceptually on at least another Pk1 with k < i. Any P.. that does not fulfil this restriction earns a negative point (with some weight) for the designed course.

(ii) Intra-Module Property:
Every occurrence of a situation, where Pij depends on Pk1 and i = k, will earn a negative point (with some weight) for the designed course.

(iii) Test Related Property:
Each test Tn. (n=0,1,2,3,4, and 5) must include enough problems (to be specified beforehand in the design) of each of the following types: Pno, Pn1, Pn2 and p 3. Each occurrence of a failure of this category will earn a negative point (with some weight) for the designed course.

(iv) Teaching Activity Related Property:

Each classroom activity for module M (n=1,2,3,4, and 5) must include enough problems (to be specified beforehand in the design) of each of the following types: Pn0, Pn1, P n2 and Pn3,. Each occurrence of a failure of this category will earn a negative point (with some weight) for the designed course. The class-room activity may involve pencil and paper based hands-on problem solving, chalk and blackboard based lecture and problem solving, computer based hands-on problem solving or interactive learning, or one or more group projects (may or may not involve computer).

(v) Feed-Back Activity Related Property:

Each feedback activity [or module Mn (n=0,1,2,3,4 and 5) must include enough problems (to be specified beforehand in the specification) of each of the following types: Pno, Pn1., Pn2 and Pn3 Each occurrence of a failure of this category will result in a negative score (with some weight).

On the basis of a pre-defined scale for negative scores, a designed course may be categorised as excellent, good, average or bad. However, a zero-tolerance for negative score should be the only recommended policy.

AN INFORMATION SYSTEMIC DATA-STRUCTURE FOR ETHICS IN COURSE DESIGN

We have presented our research result in terms of a model course design with six modules (M_0, M_1, M_2, M_3, M_4., and M_5, M_0 being the prerequisite module) and, in n-th module, with four types o course materials (P_{n0}, P_{n1}, P_{n2}, and p_{n3}). For this specific course design, then, we will have twenty-four topics in total. Each topic wit have at least nine attributes: key value (let us denote it by KV, and define it as 10*i + j, where it is the module index and j is the topic index inside the module), topic name (let US use TN to denote it), the key value of the topic that it is mainly dependent on (MDO), frequency of occurrence in the test (FOT), name of the test in which it is included (TN), frequency of occurrence in the back-up (FOB), name of the back-up in which it appears (BN), frequency of occurrence in the class-room activity (FOA), and the name of the class-room activity in which it appears (AN).

Using the language of information system, we can say that the design information of this course can be recorded using a file of twenty four records where each record has nine fields, and the nine fields being: KV, TN, MDO, FOT, TN, FOB, BN, FOA, and AN. The information of this file can be used to record and monitor the quality of ethics in the designed course.

CONCLUSIONS

In this report we have presented a technique to design a course where HFL is taken into account thereby combining ethics in the course design. The specification of the design is expressed in a form that can be used to generate an algorithm to quantify the ethical content of a course that is designed following this specification. Finally, we have presented an information systemic data-structure to record and monitor the ethical content of the designed course.

References

Dey, Sajalendu, "An Investigation into the Structure of Ethics in Document Design: A Preliminary Reports", a paper presented at the First Annual Ethics and Technology Conference, March 9, 1996' Loyola University, Chicago, Illinois, U.S.A., (unpublished).

"1996 World Assembly Announcement and Invitation", the ICET flyer for its 43rd World Assembly (Jordan, Amman, December 16-21, 1996), published by ICET.

"Shaping the Future: New Expectations for Undergraduate Education in Science, Mathematics, Engineering, and Technology, a report on the review of undergraduate education by the Advisory Committee to the National Science Foundation Directorate for Education and Human Resources, Publication No. NSF 96-139, National Science Foundation, 4201 Wilson Blvd., Arlington, VA 22230, U.S.A., (Fall 1996).

Williams, Luther S., "Charge to the Subcommittee for Review of Undergraduate Education in Science, Mathematics, Engineering, and Technology, Advisory Committee to the Directorate for Education and Human Resources, National Science Foundation, 4201 Wilson Blvd., Arlington, VA 22230, U.S.A., (June 1995).

Abbott, James, "Sharing Craft Knowledge: The Soul of Principal Peer Assessment", T.H.E. JOURNAL, Volume 24, Number 4, pp. 97-100, published by: T.H.E. JOURNAL, 150 131 Camino Real, Suite 112, Tustin, CA 92680-3670, U.S.A., (November 1996).

For a description of Demming's "14 Points and the Reduction of Variation", please see Gitlow,H., A. Oppenheim, and R. Oppenheim, "Quality Management: Tools and Methods for Improvement", pp. 457-474, publishes by: IRWIN, Boston, Massachusetts, U.S.A.,(1995).

Glasser, William, "The Quality School: Managing Students Without Coercion", published by: Harper Perennial, New York, NY, U.S.A., (1990).

Prabhu, S.S., and N.K.Ramarapu, "A Prototype Database to Monitor Course Course A TQM Approach", T.H.E. JOURNAL, Volume 22, Number 3, pp. 99-103, published by: T.H.E. JOURNAL, 150 El Camino Real, Suite 112, Tustin, CA 92680-3670, U.S.A., (October 1994).

For example, please see, "Distance Education: A Way to Individualize Learning and Teaching", SIGCUE OUTLOOK, Vol. 23, Nos. 1 and 2, pp. 2-10, published by: Association for Computing Machinery, 1515 Broadway, New York, NY 10036, U.S.A., (April 1995).

Webster's New World Dictionary of American English, Third College Edition, Editor-in-Chief: Victoria Neufeldt, published by: Webster's New World Dictionaries (a division of Simon and Schuster, Inc.), New York, NY (1988).

THE PRACTICAL EDUCATION PROGRAMME AT THE UNIVERSITY OF JORDAN: A LOOK FROM

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1. INTRODUCTION

Few people would dispute the importance of university programmes in preparing and training, particularly in the field of education. Jordan, a developing country, that is small in size and modest in natural resources, has long realised the value of investing in its human resources. In fact, noticeable and rapid progress has been achieved in the country over the past two decades or so.

As far as teacher education is concerned, significant developments have taken place recently. A major turning point was the First National Conference for Educational Development held 1987. The role of national universities in promoting the quality of teaching was stressed. Among the recommendations was the necessity to offer relevant pre-service and in-service programmes that eater for the growing needs of Jordanian schools and teachers. In response, Jordanian universities have reconsidered their teacher education programmes and introduced necessary changes and amendments in the courses they run.

2. Practical Teacher Education at the University of Jordan: A Historical Perspective

Since it was established in 1962, the University of Jordan (henceforth UJ) has been concerned with the quality of education in the country. In fact, a major objective of the UJ has always been the preparation and training of qualified teachers and other supporting personnel in the field of education. Both pre-service and in-service programmes in teacher education have been offered in the UJ since the 1960s. The first phase was between 1962-1972 where education programmes were offered within the Department of Education in the Faculty of Arts. A four-year B.A programme was offered for students of education. Basically, the study plan included theoretical courses in education and psychology. There was, however, one course that seemed to have catered for practical teacher education. The course was entitled "Applications: Observation and Criticism" to be taken by third-year students (two hours a week) and fourth-year students (four hours a week). There is no documentation on what the course involved or how it was implemented, but it could be assumed that students were exposed to lesson observations with some sort of performance evaluation.

The second phase started in 1972/ 1973 when the Faculty of Education was created and a new study plan was devised for the B.Ed degree .Out of the 132 credit hours required, the study plan included a single course named " Practical Education " which was allotted 3 credit hours. Unfortunately, no written data is available on the course content and methodology. Personal communication with some staff members who taught the course shows that the course was treated as any other academic course i.e. theoretical information on teaching methods given by a university lecturer in a university lecture room, probably with some micro-teaching sessions. Students in the course could have been sent to nearby schools for observation purposes. It is hard to

872

imagine, however, that the course was efficient in that form. For one thing, the weight given to the course (3 credit hours) was extremely mean. On the other hand, the whole operation of the course was left to the individual lecturer who was lift to his/her own resources. In other words, there was no institutionalisation within the Faculty of Education to cater for the many needs and problems that could arise during any stage in the course.

Nonetheless, two research studies were published in connection with the course during that period, by Abu-Hilal (1981)and Zeitoun and Obeidat (1984) respectively. The former tried to measure the effect of the Practical Education course on the teaching performance of the student teachers who were enrolled in the first semester of 1970/1979 A sample of 40 students from those enrolled in the course was evenly divided according to their scores on a pre-test. The first half continued taking the course and being used as an experimental group, while the second half (control group) were asked to postpone their enrollment for one year and register in a substitute required course of their own choice. The results indicated that the teaching performance of the experimental group (i.e. those who took the course) was better than their control group counterparts according to a Stanford University teacher evaluation instrument . Abu-Hilal also criticised the manner in which the course was implemented and suggested creating an 'experimental school' for teaching practice. He further advised the Faculty of Education to establish a microteaching ' clinic'.

On the other hand, Zeitoun and Obeidat (1984) investigafed the attitudes of student teachers enrolled in the Practical Education course during 1980/1981 and 1981/1982. The sample consisted of 41 students who completed the course in 1981 and 17 students who were taking the course in 1982. The results of the study revealed that the majority of the subjects (78.2%) confirmed that the course helped them in the areas of lesson planning, formulation of objectives, selection of teaching activities and The researchers recommended that the teaching aids, and evaluation of objectives. Practical Education course should continue and suggested establishing an ' internship' programme in which student teachers receive a one- year training course similar to that used in the medical professions.

It is ironic, however, that not only were the results and recommendations of the afore-mentioned studies neglected but also the course itself ceased to be. In 1985, a new study plans for the B. Ed degree was introduced but without any course for teaching practice. Therefore, this third phase that lasted from 1985-1990 is characterised by its lack of a practical education component.

In response to the recommendations of the First National Conference for Educational Development (1987), the UJ has restructured its teacher education programmes within the new Faculty of Educational Sciences. (henceforth FES). In the light of the new changes amendments in the Jordanian educational system, two B.Ed programmes were initiated: a B.Ed in Grade Teacher Education aimed at preparing teachers for Grades 1-4 (a Class teacher is to teach all subjects to a particular Grade) and a B.Ed in Field Teacher Education aimed at preparing teachers for Grades 5-10 (a Field teacher is to teach a particular subject matter i.e. English, Arabic, Islamic Education, Social Studies, Mathematics, Science, and recently Vocational Education . Both programmes prepare teachers for the Basic Stage (Grades 1-10). As for the Secondary Stage (Grades I 1-12) teachers are required by law to have a B.A or a B.Sc in the subject and a Diploma or a M.Ed in education.

In the new B.Ed programmes, the student teachers are expected to complete 132 credit hours over a four-year study plan. These are divided follows:

	Grade Teacher	Field Teacher
University Requirements **(general knowledge)**	21	21
Faculty Requirements **(general ed. knowledge)** **Specialisation Requirements:** **- academic (subject matter)**	18	18
courses	45	57
- educational courses	48	36
Total	132	132

It is important to point out here that 9 credit hours in the new plan were devoted to Practical Education; 3 credit hours were called Theory and 6 credit hours were called Practice.

Although this development towards increasing the practical input in the B.Ed programmes is significant, the bias is still clearly for the theoretical courses, i.e. 9\132= 6,8% It is also worth noting that the Diploma and M.Ed. programmes do not include any practical components which sheds doubts on the quality of the teachers who join such programmes after graduating with B.A or B.Sc. degrees in subject matters.

3. The Practical Education Programme: Status Quo

In the early 1990s, the Jordanian government in cooperation with the World Bank and other international funding agencies has devoted substantial funds for the purpose of improving the standards of teacher education in the country. Jordanian universities have benefited from this, particularly Faculties of Educational Sciences. New buildings were set up and modern equipment is being purchased. Staffs of these faculties were sent to the U.S.A in order to update their knowledge in the field of Practical teacher education through attachments to a number of American universities. Staff development also involved some postgraduate training to the Ph.D. level in both American as well as British universities. In April 1996, the European Union has granted Jordan 6 million ECU for the purpose of improving teacher education in Jordanian state universities. Substantial funds will be available over the next four years of the project to practical education programmes in addition to general institutional and managerial development.

Since the new study plan for the B Ed degrees in teacher preparation included 9 credit hours for Practical Education, the UJ has established in 1993/94a new unit within the Faculty of Educational Sciences called Practical Education Programme (henceforth PEP). The overall aim of this unit is to plan, implement and evaluate practical teacher education courses in the 8 specialization areas offered in the Department of Curricula and Instruction. Particularly, the PEP aims at providing school- based training which involves process in Jordanian schools and practical skills in teaching. It also aims at enhancing positive attitudes among student teachers towards the profession. The PEP also seeks to encourage applied research related to practical problems in cooperation with schools.

3.1 The Organisational Framework of the Programme

A member of staff from the Department of Curricula and Instruction is appointed as Director by the UJ president upon the recommendation of the FES Dean. This appointment is for a renewable academic year; an allowance of 45 JD per month is paid to the Director for managing the programme. The Director is responsible directly to the Dean though the Programme coordinates its activities with the Department of Curricula and Instruction as the courses of Practical Education carry the code number of the Department .So far the PEP has been semi-independent in terms of administration although academically it is attached to the Department.

Within the Programme, there is a full-time secretary and a cadre of 12 full-time 'trainers' who were recently recruited specially for the PEP. Almost all staff have had taught in Jordanian primary schools for a number of years. Seven trainers have M.Ed qualifications in their subject areas whereas the other five are qualified at the B.Sc., B.A, or B.Ed level. It is expected that most of these trainers will receive overseas and local training over the next few years.

In addition to the trainers who work as employees rather than academic staff, the PEP has been assisted by a few academic staff members in the Department of Curricula and Instruction in teaching the theoretical component. The PEP has access to technical facilities in the Educational Technology Programme in the FES. In addition, two one-way mirror teaching laboratories being prepared for the purposes of the PEP.

3.2 Cooperating Schools

Twenty primary schools were nominated by the Ministry of Education to work with the PEP These schools are located in the UJ vicinity. In addition, five private schools are cooperating with the PEP including the UJ Model School. The PEP coordinates with these schools directly regarding student teacher allocations and number of student teachers who can be accommodated.

Official letters are sent to the Directors of Education at the beginning of each semester in order to get permission for the public schools to work with the UJ . The school administration is requested to nominate a cooperating teacher (mentor) for a maximum of 2 student in a semester. These mentors are paid 30 JDs for supervising a student teacher during the semester as an incentive. In the new Jordanian-European Project for Improving Teacher Education in Jordanian Universities some funds will be designated to these schools in the form of materials and technical assistance.

3.3 The Current Mechanism of Training

The PEP is responsible for planning, implementing and evaluating only 9 credit hours in the study plan. These 9 credit hours are devoted to 2 courses: Practical Ed. (Theory): 3 credit hours, and Practical Ed. (Practice): 6 credit hours. The aim of the theoretical part of PEP is to prepare student teachers for the teaching practice in the cooperating schools. Student teachers are expected to have completed 100 credit hours approximately among which courses on teaching methods of various subjects. During this course which is conducted in the UJ, student teachers are exposed to lectures, workshops oriented to needs and problems of leaching practice Focus is given in this course to teaching competencies that cover lesson planning, classroom management, analysis of curricula and teaching materials, and assessment of learning.

The course requires student teachers to visit cooperating schools individually to do classroom observations and report on their experiences. School teachers and administrators are also frequently invited to the UJ to give presentations on various aspects of schoolwork and answer student teachers' inquires about leaching end learning from a practical perspective. Students are evaluated on the basis of their reports on school visits and examinations testing their awareness of teaching practice, skills in analysing teaching materials, and attitudes to the profession.

The teaching practice component in the PEP is given 6 credit hours. This course aims at actually exposing student teachers to the teaching/learning situation itself. Through this exposure, student teachers are expected to gain first hand experiences in lesson planning, classroom management, evaluation, and other teaching duties. It is also hoped that the teaching practice experience shapes student teachers' positive attitudes and enhances their readiness for teaching.

Students are allocated to cooperating schools before the school semester starts and given written notes and instructions on their roles in relation to the school environment. The training is supposed to be done in stages as follows:

Stage 1:	school observation: I week
Stage 2:	general classroom observation: I week
Stage 3:	subject classroom observation: 2 weeks
Stage 4:	partial (micro-teaching) : 2 weeks
Stage 5:	full teaching: 10 weeks

Student teachers are expected to work under the local supervision of the cooperating (mentor) teachers and the external supervision of the trainers who visit schools regularly Student teachers go to schools only 3 days a week and spend 6 hours a day.

The evaluation of student teachers' performance is carried out continuously through reports and forms written by cooperatine teachers, school principals and trainers However, there is no input at the moment by university academic staff members.

As from 1997/98 amended the study plan will be implemented and the PEP will be responsible for 12 credit hours. A new mechanism of training is being considered for the new PEP UJ bylaws. It is worth mentioning here that these regulations state that student teachers can register for the PEP only in their semester of graduation. i.e. after having completed 120 credit hours of the study plan. It also requires student teachers to commit themselves totally to the teaching practice semester Student teachers will be required to work in a cooperating school for 16 weeks, 5 days a week, 6 hours a day The process of training will go in 5 stages as follows:

Stage 1: 1 week - School observation
Stage 2: 1 week - General classroom observation
Stage 3: 2 weeks - Subject classroom observation
Stage 4: 4 weeks - Partial teaching
Stage 5: 8 weeks - Full- load teaching

As far as evaluation is concerned, the new bylaws specify the following requirements:

1. Cooperating school report written jointly by the principal and the cooperating teacher: 20%
2. Field experience file (portfolio) to be prepared by the student teacher reporting his/her reflective experience on various aspects of the training programme: 20%.
3. University supervisor and trainer report written jointly on student teacher progress as noted in school and class visits and university-based meetings: 30%

4. Final examination: 30%.

4. The PEP: Attitudes and Problems

4.1 Introduction:

In what follows I shall report some major findings of a survey I have recently conducted on attitudes and problems in relation to the various aspects of the PEP. In fact, this is the first empirical study of the PEP since it was created in 1993. Therefore, it is hoped that the insights gained will be useful for decision-makers and researchers alike. The survey covered all student teachers (N=143), in the seven areas of specialisation offered, enrolled in the course during the second semester of 1994\95. In addition, 121 cooperating teachers and 19 cooperating school principals were involved in the study.

4.2 Instruments and procedures

Two 5-point scale questionnaires were designed for the purpose of the study. The first contained 89 items addressed to student teachers whereas the second included 28 items addressed to cooperating teachers and principals. The inclusion of items was based on the findings of related literature, particularly in the Arab World, and on the researcher's experience in the PEP as director and teacher trainer. The content of the student teachers' questionnaire covered a wide range of issues of concern i.e. how student teachers evaluated their experiences in the two components of the programme in terms of their own roles and perceptions, the role of the university supervisors, and the role of cooperating school staff, and the role of the PEP itself. On the other hand, the cooperating teacher's and principals' questionnaire aimed at identifying their attitudes towards some aspects of the PEP.

Both questionnaires were pilot-tested and reviewed by a panel of university and cooperating schools staff before being implemented at the end of the second semester of 1994\95. The implementation was carried out in one week during which the student teachers were visited in their practice schools and requested to respond to the questions in the questionnaires. The questionnaire for the cooperating teachers end principals was handed to them and they were requested to return it a week later. The data was computerized and descriptive statistical procedures were used in obtaining the findings.

4.3 Findings and discussion

The figures showed that the majority of student teachers were female (76.2%, N=109). This is not surprising since the teaching profession in Jordan is not attractive to Jordanian male school graduates. This is understandable as the salaries are low and the opportunities for personal development are limited. It is also widely believed in Jordan that education is more suitable to women rather than men. Women also probably find a higher level of job satisfaction in education than men.

It seems that the student teachers' attitudes towards the cooperating schools were generally positive. This is shown in the following figures:

- 66.5% agreed that the cooperating school in which they practiced was appropriate for teacher training purposes.
- 73.5% disagreed that the cooperating school administration ignored them.

- 94% agreed that their relationship with the cooperating school teachers was good and normal.
- 64% agreed that the cooperating school tried to provide facilities for the student teachers.
- 90% disagreed that their relationship with the cooperating school pupils was tense in general.
- 62.4% disagreed that the cooperating school did not provide a place for the purpose of meetings with the university supervisors.
- 82,8% were satisfied with the timetable given to them by the school.
- 72.1% disagreed that they felt other teachers in the school did not like their presence around.
- 89.2% felt that their presence at the cooperating school helped them make new friends.
- 92.2% felt that the school pupils accepted them as teachers.
- 83.8% denied that their relationship with their cooperating teachers was tense.
- 82.4% acknowledged that the cooperating teacher helped them in overcoming problems.
- 83.8% said the cooperating teachers gave them guidance and encouragement continuously.
- 83.2% agreed that the cooperating teacher encouraged them to become self confidant.
- 75.6% said they generally enjoyed their presence at the cooperating school.

However, the student teachers had a number of reservations towards the cooperating schools. First, 59.3% of them agreed that they had problems in obtaining the school textbooks and teaching materials, second, 64.1%complained about the lack of teaching aids in the cooperating school. Also 77.9% of the student teachers said they were experiencing problems in transport to and from the school. In fact, this is a major problem facing the student teacher population despite the fact that all cooperating schools are in the UJ area.

On the other hand, the findings of the questionnaire addressed to teachers and principals in the cooperating schools showed that75.8% of them were female. More than a half of the cooperating staff (57,8%) had community college qualifications. This, in fact, sheds some doubts on the subject matter competence among the cooperating teachers, especially because they are supposed to train university-level student teachers. However, it is reassuring to find out that the majority of the cooperating staff (84.5%) had more than seven years of experience.

The cooperating teachers and principals' attitudes towards the student teachers seem to be positive as shown in the following figures:

- 99.3% agreed that the student teachers showed up at school on time (i.e. 8 o'clock a.m.)
- 85.6% agreed that the student teachers abided by the rules and regulations of the school.
- 92% thought the student teachers showed enthusiasm towards the profession.
- 97.8% felt that the student teachers benefited from their being at the school.
- 97.9% agreed that the teaching skills among the student teachers improved.
- 95.6% thought that the school pupils accepted the student teachers as teachers.
- 97.8% felt that the student teachers indulged positively in the school environment.

- 93.6% denied that the relationships with student teachers was tense and doubtful.

However, the cooperating teachers and principals expressed some reservations as seen in the figures below:

- 78.3% said there should be a financial allowance to be paid to the principal of the cooperating school similar to that paid to the cooperating teacher
- 89.1% preferred that the student teachers commit themselves completely to the PEP i.e. all school days with no university courses taken simultaneously with the teaching practice.
- 91.4% stressed the importance of the schools role in the final evaluation of student teachers' performance. As for the relationship between the student teachers and the university supervisors, the findings suggest that in general the student teacher population were relatively satisfied. This is evident in the following figures:
- 77.4% agreed that the supervisors gave them adequate guidance in lesson planning.
- 73.1% acknowledged that the supervisors helped them overcome their problems in teaching practice.
- 89.5% denied that the supervisors caused them embarrassment during their class visits.
- 83.8% rejected the statement that the supervisors were rigid and strict.
- 75.9% felt that the supervisors were competent and qualified for the job.

However, the student teachers (62.9%) expressed dissatisfaction concerning the number of visits paid by the supervisor to the school. Also, they (63 8%) were not happy with the amount of feedback given to them based on their reports and performance in the classroom.

It is worth noting here that the supervisors during the semester in which the study was conducted were all senior supervision staff seconded to the UJ by the Ministry of Education. These supervisors worked for the UJ for one academic year only after which they returned to their duties in the Ministry.

5. Concluding Remarks

The previous findings provide a strong base for optimism regarding the future of practical pre-service teacher education at the UJ. The PEP is still in infancy, yet significant change has been achieved. There is now an increasing realisation among educationists in Jordan that university teacher education programmes have been theory-oriented and that for quality teacher education to occur more skill-based training is required. However, the PEP at UJ is far from coming of age yet. Problems and challenges still lie ahead. Among such problems is the very small number of credit hours given to teaching practice. In developed countries, e.g. UK more than [illegible] of university teacher education programmes is school-based and practical. Even in Jordan, most of the time spent on medical doctor preparation is clinical and hospital-based. Moreover, the status of the PEP within the FES is still shaky. The word "programme" suggests an inferior status compared to a "department" where all staff are academics. The PEP trainers are currently "employees" and this affects their morale negatively. More institutionalisation is needed where the PEP probably becomes an Institute or a

Department that has its own budget and facilities in addition to a cadre of well-qualified and appreciated staff members.

Partnership with cooperating schools should be maintained and strengthened. In this respect, clear criteria for school selection is to be established. Equally important, the cooperating teachers and principals have to be selected carefully and training courses should be devised to update their awareness of the training More incentives should be considered to maximize the cooperation of competencies partner schools.

References

ابوهلال، أحمد، ١٩٨١، دراسة تجريبية لتقييم مساق التربية العملية المقدم في كلية التربية بالجامعة الأردنية، دراسات، مجلد٧، عدد ١، ص ٥٣ – ٦٧.

حسان، محمد حسان، ١٩٩٢، التربية العملية في دول الخليج العربية واقعها ووسائل تطويرها مكتب التربية العربي لدول الخليج، الرياض: السعودية

زيتون، عايش وسليمان عبيدات، ١٩٨٤، دراسة تحليلية تقويمية لبرنامج التربية العملية في الجامعة الأردنية، دراسات، مجلد ١١، عدد ٦، ص ١٥٧ – ١٧٥.

الماشل، سعد جاسم ةمحمد عودة محمد، ١٩٩٠، تقويم أثر التربية العملية في اكساب الطالب المعلم الكفايات التعلمية، جامعة الكويت، الكويت.

Broke, Hilda and Vicky Mayfield, 1995. The Roles of the Cooperating Teacher and University Supervisor in learning to Teach. Teaching and Teacher Education, Vol. 11, No 5, pp.501 1- 18.

Dart, Lisa and Pat Drake, 1993, School - based Teacher Training: a conservative practice? Journal of Education for Teaching, Vol.19, No.2, pp. 175-189.

Freeman, Joan, 1992, The Education of Teachers, In, Quality Basic Educational The Development of Competence, the United Nations Educational, Scientific and Cultural Organization, Paris, France. Pp. 175-191.

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PREPARING TEACHERS FOR SCHOOL REFORM: CASE STUDY OF ONE TEACHER EDUCATION PROGRAM

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Figure 1.0 *Opening Dimensions of Education*
(artwork courtesy of Heidi Herbst)

LINKAGE GOALS

A deliberate attempt was made by the Education Department of Wisconsin Lutheran College to achieve specific goals through any eventual K-12 district partnership. The first goal was to provide the desired environment for pre-service College students. Opportunity for pre-service education majors to work with master teachers, identified jointly by College faculty and district administrators, was a priority. Also significant within this consideration was an opportunity for pre-service students to work with students having socio economic, cultural, and ethnic diversity. The K-12 environment had to have teachers who exercised educational best practices in classrooms having significant multicultural characteristics.

The second goal was to have master teachers form mentoring relationships with College students. The idea was not to have just a casual awareness of one another, but rather an intense and vibrant symbiosis. The College students would provide an extra set of eyes and hands in the classroom to assist with everyday details, supervision, tutoring individuals and small groups, coaching in regard to student research, and helping in everything from planning to evaluation of individual student and class educational experiences. Connecting this type of service-learning activity with concurrent College discussions of theory and practice would enable pre-service College students to effectively assimilate invaluable knowledge and experience. The district K-12 faculty would be able to directly influence and impact College students in pre-service education and training. Connecting this type of action reaming activity would enable district educators to effectively empower future teachers and current students in the grades. Finally, such a mentioning relationship would assist College students in employment and early career advice.

The third goal was to have a positive impact upon the communities supporting these district schools. Through the guidance of district K-12 teachers and students, local service-learning projects would be selected and initiated. Projected types of initial activities were environmental awareness and clean-up efforts, service to the elderly, anti-drug messages for young at-risk students, literacy programs, global awareness, and so on.

The fourth, and final, goal was to have professional ties with district educators. College faculty would have opportunities to remain cognizant of current educational issues through opportunities to observe and teach on K-12 campuses and in K-12 classrooms. District educators would have the opportunity to teach pre-service students on the College campus in areas of interest and expertise. College faculty and district K-12 faculty could collaborate on action research projects, in-service training, and grant proposals.

ESTABLISHING LINKAGES

Once the goals of the desired linkage were established, research efforts were made to identify and initiate formalized linkages. From the outset, it was recognized that such a relationship would by necessity be fluid. Conditions within or adapted goals of either the College or the local district might well change to the point that a continued partnership would not be practical or advisable. With this condition in mind, efforts began to first identify and then establish linkages.

There are approximately 25 school districts within easy commuting distance from the College. These range in size from one huge, metropolitan district with a distinctly urban character to several small, almost rural school districts. Based upon the goals previously established, many districts were eliminated for a variety of reasons. The more distant, small, and almost rural school districts lacked faculty and student diversity. The huge, urban district was already connected to at least six other colleges and universities in regard to student teaching. Even though schools were still available that did not have formal linkages with other teacher-training institutions, it was felt that the College's efforts to initiate a meaningful, effective symbiosis across a K-12 educational system would have been too fragmented and negligible to have had a significant mutual impact.

Five school districts were identified as having the appropriate diversity and size to offer meaningful interaction. Of these, two have been approached--for our discussion purposes these will be identified as Suburban School District (11 schools, 369 teachers, 4861 students) and Village School District (13 schools, 560 teachers, 7372 students).

In contacts with both school districts, two major common concerns have arisen regarding the establishment of such a linkage. First, communication with administrative officers and faculty has been a challenge. Finding mutually available meeting times, developing rapport, assuring all concerned that no ulterior motives were in the works, making certain that union concerns were addressed, exactly delineating everyone's expectations, and addressing a host of other questions and fears have taken time and energy. Second, the coordination of College students working within the K-12 schools and classrooms has presented a major investment of time, effort, and energy. K-12 schools have frequent guest speakers, assemblies, field trips, and other interruptions. College students have other courses, commitments to part-time jobs, athletics, fine arts, and their social life Finding mutually agreeable times for College students to actually connect at district schools for meaningful experiences has been a formidable obstacle.

In addition, there have been other individuals and groups involved. It must be acknowledged that addressing the concerns and apprehensions of College students has taken effort. This arrangement has been somewhat stressful to them and the transition from in-class low-level cognitively-based sample lesson presentations before peers, in conjunction with very loosely structured school observations, to a new system structure of intense affective field work with established master teachers, has created both anxiety and excitement. Everything from the need for transportation of College students, to assuring local school districts that arriving College students have no criminal record, has taken coordination and conscientious effort. It must also be acknowledged that students in the K-12 classrooms in turn have needed time to adjust and feel confident and comfortable with new faces and, at times, awkward College students.

INITIATING LINKAGES

After several frustrating efforts and delays to make contact with these targeted districts, success was achieved by contacting each district's professional development specialists. These individuals, while neither district nor building administrators, nor classroom faculty members, nevertheless enjoyed the general respect and cooperation of both administration and faculty. Furthermore, they were much more approachable and available for initial discussions. Finally, both were immediately enthusiastic about such a partnership because of the in-service possibilities such an innovation would provide.

These professional development specialists in turn took the proposal to both the district administration and the district faculty. The enthusiasm and persuasive skills of these individuals were invaluable. Both individuals arranged meetings with College faculty and district administrators and faculty. Both individuals served as moderators in question and answer sessions between College and district personnel. Both individuals also have since assisted in joint grant proposals between the College and the districts in regard to action learning projects for district and College students, and district and College faculty.

ASSESSING LINKAGES

After only the first one and one-half years of this particular type of partnership, insufficient evidence has been accumulated to conclusively claim total satisfaction or complete failure. However, it is obvious from all parties involved that significant success has been achieved to warrant continued effort and refinement. Only the most basic and rudimentary evaluations and assessments have been made to date by district administrators, district professional development personnel, district faculty, district students, College faculty, and College students.

At Suburban School District, the partnership has been truly successful at only one school. The remainder of the district has developed a "wait and see" attitude in regard to the value of the partnership. There have been several reasons for this. First, this has been an innovation and possible change is often perceived as intimidating. Second, established (and already overly extended) faculties have expressed concern about possible time commitments in mentoring pre-service College students. Third, other faculties have expressed concern about College students observing, and possibly evaluating or even out-performing them. Fourth, building administrators have not been particularly enthusiastic about promoting an innovation that was not developed by them. Fifth, a number of administrators and faculty expressed enthusiasm about the proposed program, but wanted to work with their own *alma maters* rather than the College because of their collegiate loyalties and affinities.

At Village School District, the response and participation has been more encouraging. In large measure this may be due to the closer proximity to the College than Suburban School District. District administrators and faculty are more aware of the College and have been on campus much more often. However, even given this measure of familiarity and cooperation, there have been some of the detractions in this school district as those listed above. In particular, the fifth concern (working with their own alma maters) has been especially prevalent.

Based upon interviews and written responses from all involved, a number of common positive and negative attributes have been identified. Positives, to date, far outnumber negative perceptions.

District administrators and faculty have been impressed with the enthusiasm and excitement of pre-service College students. This energy has helped vitalize students and faculty alike. College pre-service teachers have introduced new approaches to curricular integration and the application of multiple intelligence in lesson design. College students have appreciated the relevancy of working in legitimate classrooms with diverse populations and master teachers. Observations brought from the districts into the College classrooms have enhanced discussions and applications of research and best practices. College faculty and district faculties have worked well together and shared insights. In-service opportunities between faculties have been initiated. District students, particularly the gifted and the challenged, have received more direct attention and intervention than ever before, all the while providing opportunity for College students to gain practical experience and maturation. Finally, the local communities have had service-learning action projects developed that have aided local environmental concerns and improved services for the elderly.

Frustration has occurred on occasion. College students are not yet all as responsible and professional as they ideally ought, and some students have been prone to tardiness and absences. District classrooms have fragmented schedules and long-developed plans have been abandoned to accommodate surprises in the daily schedule. Some district faculties have appeared to view pre-service. College students as personal assistants working at their beck and call. Communication between College and district faculty has not been perfect and unpleasant surprises have occurred.

However, in response to these specific concerns positive outcomes have been realized. Some College students have discovered they do not wish to teach, well before they had invested years into their professional education. Communication gaps within and across schools, school districts, and the College Education Department have been identified and improved. College students have come to truly appreciate the work of an educator and in the vast majority of instances, have come to love and value working with children.

LIKELY IMPACTS OF LINKAGES

While the final assessment of this program is far from complete, and there are still so many ongoing revisions occurring that predicting lasting impacts of the linkages would be premature, there is a great deal of excitement and confidence within the district schools involved and the College. To date, based upon results already achieved, confidence is high in regard to several matters.

The first likely impact is that College pre-service students will have an increased awareness and appreciation for what is involved in being a professional educator. Their affective development already has been enhanced tremendously, and not one College student has suggested going back to sample lessons taught solely before peers in a College classroom. Already learning is seen as more connected, indeed seamless, and life long at that. A second likely impact will be that more district schools, and additional districts, will seek to develop legitimate partnerships with college teacher education programs. In these days of constrained resources for community K-12 educational programs, and indeed other social responsibilities, the opportunity to connect with the additional physical and personnel resources of nearby colleges and universities is too valuable to ignore. Despite concerns in regard to expectations and communication between the districts and the colleges, the opportunities far outweigh the threats.

CONCLUSION

This program between Wisconsin Lutheran College and local districts has been tremendously challenging and invigorating. As greater stresses are placed upon communities and, in turn, schools due to social stresses, reduced financial capacities, and a simultaneous demand for increased global connections and technological innovations, collegiate and K-12 partnerships are inevitable. The partnership opportunities for the College, the local districts, and all faculty and students involved are limited only by the self-imposed constraints of imagination.

References

Bloom, Benjamin, ed. Taxonomy *of educational objectives the classification of educational goals.* New York: D. McKay Co., Inc., 1956.

Bonwell, Charles C. and James A. Eison. Active *learning: creating excitement in the classroom.* Washington, D. C.: George Washington University Press, 1991.

Brooks, Jacqueline Grennon and Martin G. Brooks. *In search of understanding.* Alexandria, Virginia: Association for Supervision and Curriculum Development, 1993.

Cramer, Eugene H. and Marrietta Castle, ed. *Fostering the love of reading: the affective domain.* Newark, Delaware: International Reading Association, 1994.

Holloway, Reola. *The effects of reciprocal teaching on comprehension.* (Unpublished master's thesis, Cardinal Stritch College, Milwaukee, Wiscosnin, 1994).

Meyers, Chet. *Promoting active reaming.* San Francisco: Jossey-Bass, 1993.

Sonnier, Isadore L., ed. *Affective education: methods and techniques.* Englewood Cliffs, New Jersey: Educational Technology Publications, 1989.

Tsuruda, Gary. *Putting it together: middle school math in transition.* Portsmouth, New Hampshire: Heinemann Press, 1994.

Tye, Kenneth A., ed. *Global education: from thought to action.* Alexandria, Virginia: Association for Supervision and Curriculum Development, 1990.

Wasserman, Selma. *Serious players in me primary classroom: empowering children through active reaming experiences.* New York: Teachers College Press, 1990.

DRAMA AND THE INFUSION OF MULTIETHNIC CONTENT: AN EXPLORATORY STUDY

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Drama and the Infusion of Multiethnic Content: An Exploratory Study

The school-age population in the United States has become increasingly diverse in terms of ethnicity, language, social class, and national origin (Grant and Secada 1990, 404). While students come to school with culturally diverse backgrounds, teachers are predominately White, middle class, English-speaking, and female (National Education Association 1992, 78-80). Such a demographic mismatch between the student population and teacher workforce suggests that teachers will need to have specific knowledge and competencies to effectively understand end relate to diverse groups of students (Baruth and Manning 1992, 200-204).

In this study I direct attention to elementary and secondary teachers who are members of the American Alliance for Theater and Education (AATE) and their efforts to highlight the experiences of specific ethnic groups through theater productions and their use of classroom drama. AATE, a professional organization comprised of artists, researchers, and teachers, emphasizes in its standards for accreditation that teachers develop "a sensitivity to and an appreciation of the diversities among cultures" in order for them "to teach effectively and work with all students in a multicultural society" (AATE and SCA 1990, 3). Because there are educational implications for the ways in which teachers think and do about ethnicity, it is important to understand what they bring to their work in the classroom. Yet little is known about the extent that drama/theater programs in elementary and secondary schools promote appreciation for cultural differences, and even less is known about their effectiveness.

Approaches to the Infusion of Multiethnic Content

This study intentionally focuses on the multiethnic component of multicultural education. Davidman defines "ethnicity" as "a sense of peoplehood, shared history, common ancestry, and a common set of political and economic interests" (1995, 11). The term "multiethnic education" is employed in this study to denote a "perspective" or "approach" that has a dual focus on: a) key concepts, terms, components, and principles in a particular discipline (e.g., theater); and b)structured educational experiences related to ethnicity (e.g., instructional units and daily lessons). Essential to providing an effective multiethnic education are classroom teachers who model and integrate attitudes of respect and affirmation throughout their teaching (Banks 1995, 19).

In further describing teachers' integration of multiethnic content, I refer to Sleeter and Grant's (1994) classification of approaches that teachers may take toward various forms of diversity. Pertinent to this study are "teaching the exceptional and the culturally different" (differences orientation) and "human relations" approaches toward diversity. Teachers who teach from a differences orientation will likely incorporate into the curriculum content about the contributions of people of color and employ a variety of instructional strategies to achieve three goals: a) accommodate the interactional patterns and learning styles of students from diverse groups, b) provide a smooth transition from home to school environments, and c) prepare students who are "different" to function productively in mainstream culture (Sleeter and Grant 1994, 4144).

While proponents of the difference orientation focus on student achievement, advocates of the human relations approach direct their attention to affective objectives. With a human relations approach, teachers attempt to reduce intergroup conflict by promoting unity, good will, and tolerance, with a focus on commonalties rather than differences among students (Sleeter and Grant 1994, 85).

Method

The purpose of this study is to examine how elementary and secondary teachers in AATE approach the infusion of multiethnic content. To achieve this purpose, five research questions guided the inquiry into current teacher perceptions and practices: 1) What actions do elementary and secondary teachers take to incorporate multiethnic content into their daily teaching (teacher actions)? 2) What goals do they have related to the infusion of multiethnic content (teacher goals)? 3) What concerns do they articulate (teacher concerns)? 4) What are the outcomes of their efforts to infuse multiethnic content (outcomes)? 5) What kinds of teacher education prepared them to incorporate multiethnic content in the classroom (teacher education)?

The information for this study comes from teachers' written responses to a questionnaire based on basic survey research principles and procedures as outlined by Fowler (1993, *54-68).* The findings of this study are organized into five categories according to each of the major research questions. Frequently mentioned items--hence, the most representative of the data collected--are included in this report. I make no attempt to rate the quality or complexity of each teacher's responses. Data subgroups, such as males and females and elementary and secondary teachers, are not discussed separately because I found no significant differences in their responses. I exclude specific details about teachers' jobs and institutions to preserve confidentiality and anonymity. The findings offer a basis for discussing what is and could be occurring to make a drama curriculum reflective of the ethnic diversity of US society.

How Teachers Discuss Multiethnic Infusion

The study surveyed approximately 325 teachers (grades K-12) in AATE, of which 51 responded (approximately *16%* return rate). Seven of the returned questionnaires were eliminated because the individual is not currently working in the classroom or residing in the US. Of the 44 teachers included in the study, 37 (84%) are female and 7 (16%) are male. A1144 self-identify as White, Anglo, European American, or Caucasian, and 2 (less than 1%) further designate they are Jewish. Teachers' ages range from 24 to 54 years; the median age is 44. Forty (91%) have eight or more years of experience.

The core group of 44 teachers work in a variety of educational contexts. Nineteen (43%) teach in suburban schools, 8 (18%) teach in rural schools, and 17 (39%) teach in city or urban schools. Twenty-four teachers (55%) teach predominantly white classes, 5 (11%) teach classes that are predominantly ethnic, and the other 15 (34%) teach ethnically-mixed classes. Of the 20 teachers who teach ethnic or ethnically mixed classes, 16 work in urban schools, while four work in suburban schools. African American and Hispanic students are the primary groups of ethnic students they report currently teaching.

887

Research Question #1: Teacher Actions

Of the 44 teachers in the core group, 40 report using a variety of literature (e.g., plays, poetry, short stories, legends, myths, and folk tales) as the foundation for their multiethnic focus. Three of the 40 teachers not only incorporate multiethnic content, but also explore students' attitudes toward gender, age, and disability.

A1120 teachers who serve predominantly ethnic or ethnically mixed classes include activities and projects designed to provide substantive knowledge about the contributions and traditions of various underrepresented ethnic groups such as African Americans and Hispanics. In addition to a focus on the feelings, thoughts, and actions of people of color, five of the 20 organize units of instruction around related concepts such as prejudice, stereotyping, and conflict resolution.

Four teachers admit to not working from a multiethnic perspective in their use of drama/theater. Of those four teachers, three report that they emphasize a mastery of subject matter and skills related to dramatic performance. Significantly, these three teachers work in predominantly White classes at the elementary and secondary levels. It is not known whether or not they believe that multiethnic education is necessary in a school environment that is not ethnically diverse.

Of the forty teachers who report that they teach from a multiethnic perspective, 34 describe "successful" strategies with which to integrate multiethnic content that fall into three broad categories. The most frequency mentioned type of strategy revolves around the concept of "color-blindness. " The teachers who mention the strategy of color-blindness seem to closely associate it with the issue of fairness. As one teacher discloses, she strives "to cast people, not color" in her creative drama activities. Through the strategy of color-blindness, teachers state that they can minimize ethnic differences, treat all students the same, and maintain positive relationships with students.

The second most discussed strategy is the strategy of responding to students on "a case- basis. " Individualizing instruction to meet a student's interests and needs seems to mean modifying the content of existing lessons and projects by incorporating literary selections written by and about specific ethnic groups. According to several teachers' responses, the issues explored in the selected material--such as acceptance by peers, independence from adults, family relationships, and identity questions--are often quite similar to chose that the student confronts in his or her own life. Unlike color-blindness which seems to apply universal standards, the strategy of individualization stresses the importance of "knowing" the individual and entails carrying out other related tasks--namely, giving additional assistance, encouragement, and attention to the attributes of the individual.

Finally, the next most frequent "successful" strategy involves a focus on the individual as he or she participates in long-term group projects. Several teachers mention the creation of improvised material and tend to use drama to investigate historical events (e.g., the internment of Japanese Americans during World War II). A few teachers generate their own scripted material to portray notable achievements of a particular historical figure (e,g., Harriet Tubman). In either case, the primary focus in these group projects still seems to remain on the effects the interactions may have on the individual student, though some attention appears to be directed to the social relations within the classroom. Similar to the strategy of color-blindness, this commonly used strategy stresses the importance of equal treatment and the sameness of educational goals and activities. However, unlike both strategies of color-blindness and individualization, teachers seem to utilize long-term group projects as a way for students to relate the content to their own sense of values.

Research Question #2: Teacher Goals

Of the 40 teachers in this study who teach from a multiethnic perspective, 35 outline educational goals. The most frequent response indicates an effort to teach about respecting others. The second most frequent type of response focuses on exposing students to ethnically diverse experiences (e.g., a guest appearance by an African American performer or a Native American storyteller). The next most frequently identified type involves working to improve social interactions and relationships among students. Less frequently mentioned responses include the goal of gaining a positive sense of self.

Research Question #3: Teacher Concerns

Analysis of the written responses offered by 29 teachers reveal four distinct types of concerns. The most frequent type of responses focuses on concerns specifically related to the implementation process--namely, about planning, adequate funding, scheduling, articulating a rationale, and finding time in an already "overcrowded" curriculum. The second most frequent responses pertain to personal concerns that include questions about what kinds of demands are required to effectively teach students from diverse ethnic heritages, their ability to fulfill those demands, and how the selection of a particular ethnic literary piece will affect support from various constituencies such as parents, the principal, their students, and other teachers. The next most frequent responses indicate a general concern with locating and evaluating teaching materials and literary selections written by and about members of different ethnic groups. The least frequently mentioned type of responses involves concerns with how the use of multiethnic content impacts students' awareness and understanding of ethnic diversity.

Only two teachers report tensions among ethnic groups in their schools and surrounding communities. Of the 29 teachers who articulate concerns, 26 state that their work with multiethnic content and materials is supported in the school environment. A majority of the teachers emphasize that their classroom climate does not necessarily reflect the school climate; rather, they strive to make the classroom a safe place where a spirit of mutual respect exists. Eleven teachers either give no response or report no perceived concerns.

Research Question #4: Outcomes

Most of the 22 teachers state that the incorporation of multiethnic content promotes greater awareness, tolerance, acceptance, respect, and understanding of members of diverse groups, and several go on to note that its use opens lines of communication among students. Despite the push for accountability in arts education (Loyacono 1992, 53-58), nine of the 22 teachers who list positive outcomes describe no assessment approach. The remaining 13 teachers report only a few assessment strategies such as teacher observation of student behaviors and structured journal writing assignments that call for detailed expression of thoughts and feelings.

Research Question #5: Teacher Education

In general, the teachers appear to perceive multiethnic education as important and essential and, therefore, pursue various forms of training in order to effectively prepare themselves for teaching students from ethnically diverse backgrounds. The most frequent responses indicate a focus on personal experiences that include the exchange of ideas with colleagues, friendships with members of ethnic groups, and self-initiated reading and exploration of multiethnic materials. The second most frequent responses identify an informal approach to professional development centered around attendance at conferences and at district-sponsored, short-term inservice workshops on multiethnic practices. According to the teachers, the conferences and workshops are scattered throughout the school year, and their attendance occurs on a voluntary rather than mandatory basis.

Discussion

What Is Occurring

The findings indicate a high degree of consensus in how teachers organize their approaches to the integration of multiethnic content. A majority of the teachers seem to conceive of multiethnic education as "teaching the culturally different" and as "human relations. " Both approaches represent an improvement over the "business as usual" approach in which no efforts are taken to incorporate multiethnic content (Sleeter and Grant 1994, 245). They use literature as a basis for clarifying concepts in drama/theater and other disciplines, especially in language arts and social studies. Through the process of transforming literature from a print to an expressive form, each student vicariously participates in a way of living that may be extremely different from their own (Banks 1994a, 45; Fennessey 1995, 16; Garcia 1995, 7). Furthermore, a large group of the teachers appears to combine the best features of both approaches. By doing so, they can direct their attention to finding compatibility between their teaching and students' learning styles while promoting unity and harmony among ethnic groups.

Their approaches of teaching the culturally different and human relations seem to be organized around the assumption that teachers can and should meet individual students' needs. Implicit in this focus on the individual student is a general support of abstract democratic ideals such as "sameness," "equal treatment," and "fairness." There is general agreement on how these ideals get translated into practice--notably, through the strategies of color-blindness and working in groups. Similar to the teachers in Montero-Sieburth's (1996) study of educational programs for at risk Latino youth, teachers in this study seem to operate with the expectation that there are universal ways in which individual students can be treated. In effect, they appear to want to maintain a safe emotional distance but hold firm to convictions to appreciate ethnic differences.

Even though these teachers' approaches of "teaching the culturally different" and "human relations" closely resemble those characterized in Sleeter and Grant's (1994) typology, their conceptions of multiethnic education, according to Olneck, may not indicate a dynamic understanding of ethnic differences. Olneck states that the most common forms of multiethnic education in the US--the teaching the culturally different and human relations approaches--"do little to explicitly represent, legitimate, recognize, or implement the claims and communal lives of ethnic collectivities" (1993, 247). Downplaying the importance of ethnicity as a difference teachers should consider may leave intact teaching practices and strategies that Shor and Freire call "falsely neutral" (1987, 13). For example, the strategy of color-blindness, on the one hand, may offer drama/theater teachers a mechanism with which to be fair, provide uniformity in instruction, and give equal treatment to every student. Yet on the other hand, color-blindness may obscure the uniqueness of that individual's experiences, and by applying some universal standard (e.g., "artistic excellence") teachers may not gain sufficient information upon which to further define that student's educational needs and curricular choices (Liston and Zeichner 1990, 620-21). Despite the availability of other, more complex models of multiethnic education, these teachers seem to focus their efforts in promoting an appreciation of ethnic differences and exposure to a few historical and contemporary artists, possible careers, artistic practices, and basic concepts. This observation lends further support to [illegible] conclusion that "so little is being done that utilizes creative drama and theater . . . as a tool for multicultural awareness, understanding, and celebration" (1995, 16). On a more positive note, one could claim, as [illegible] suggests, that these teachers' contributions toward the celebration or awareness of ethnic differences may [illegible] education (1995, 166).

What is important for teachers to consider when searching for multiethnic content and instructional activities to fulfill students' interests and needs is that students do indeed bring to the classroom various social, economic, and ethnic memberships. Resonating with this view, Eisner advocates making arts programs in schools more inclusive and equitable through the acceptance of each student's artistic work as carrying "personal signature" (1991, 16). The strategy of individualizing instruction that many teachers in this study employ in their drama/theater activities seems to take into account specific multiethnic content, ethnic group solidarity, and students' aspirations. As Sleeter (1992) points out, many factors related to time, class size, the required curriculum, the structure of academic programs in school, and a fear of potentially controversial topics may mitigate against the prolonged use of such a strategy.

What Could Be Occurring

Sleeter and Grant (1994) prefer the comprehensiveness of "education that is multicultural and social reconstructionist." According to Sleeter and Grant, teachers who incorporate this approach direct the focus of the curriculum on social justice issues (e.g., racism, sexism, homophobia), problem solving, social critique, identity issues, citizen participation, empowerment, and making social changes (1994, 209-212). In contrast to the approaches of teaching the culturally different and human relations, advocates of education that is multicultural and social reconstructionist recommend a fundamental shift in ideological viewpoint, from one that focuses on the autonomous, "generic" individual (Nieto 1995, 199), to one that endorses preservation of ethnic identities (Banks 1994b, 36) and social membership in particular, grass-roots communities (Igoa 1995, 590). This way of thinking moves away from explanations based on the "melting pot" theory which promotes the continuous surrendering of ethnic traits in order to become part of one homogeneous amalgam ([illegible]).

Understanding of differences among students requires going beyond the knowledge that differences exist. Culturally responsive teaching, according to Hooks and West, is a type of social interaction "which says that studying the 'Other' is not the goal; the goal is learning about some aspect of who you are" (1991, 33). A focus on "who you are" entails an examination of ethnic affiliation and avoids what Collins and Sandell call "the passivity of intellectual activity" (1992, 13). Teachers need to provide an environment in which "differences" are recognized as strengths rather than weaknesses to be remediated (Baruth and Manning 1992, 24). They also need to offer the kinds of information that will empower marginalized students of color to take civic and personal action to change their situation--that is, to create a more just and a more democratic society (Banks 1991, 24-25; Nieto 1992, 211). Skirting the "Hows" and "whys" students might raise during class activities may perpetuate what Collins and Sandell describe as "the tendency to romanticize and trivialize, to render harmless . . . the differences among students" (1992, 11). Pushing the issue one step farther, Campbell asserts that the denial of ethnic differences is actually "a privilege reserved primarily for members of the dominant group" (1996, 37). From a perspective that recognizes and affirms ethnicity, a quality drama/theater program according to [illegible] [illegible] on the [illegible] [illegible] our theater/literacy seeks to [illegible] on what students bring to the learning [illegible], to help enhance their positive self-identity, and to instill an understanding of how the creation of [illegible] [illegible] [illegible] (1992, 272). To sustain a [illegible] education [illegible] [illegible] professional development opportunities [illegible] [illegible] [illegible] [illegible] teachers' visions of multiethnic education (Ross 1996, 139); b) address teacher concerns about their ability to be aware of and sensitive to ethnic differences (Marshall 1996, 253), and c) assist teachers in examining and reflecting on their teaching practices and understandings about diverse groups of students (Sleeter 1992, 144–147).

Concluding Remarks

Sleeter and Grant (1994) outline a set of approaches a teacher may use in dealing with ethnicity in the classroom. Several studies show that the model of multiethnic education employed by the teacher in the classroom influences greatly the manner in which ethnic differences will be conceived, interpreted, and understood (e.g., Boyle-Baise and Washburn 1996; Valli 1996). There is no doubt that a drama teacher--regardless of his or her ethnic background--can play a pivotal role in the implementation of multiethnic education.

The findings of this study are particularly significant for several reasons. First, a small group of teachers, who represent a range of educational contexts and teaching experiences, claim to incorporate multiethnic content into their regular teaching routines and have begun to modify the content of their drama/theater programs to represent the diverse ethnic groups in US society. Second, findings are based on what drama/theater teachers themselves describe from their own teaching experiences and thus reflect their efforts to continuously expand their programs. Third, they are incorporating a multiethnic perspective at a time when there are little professional development opportunities and research in the field of drama/theater education to inform the decisions which must be made (Lazarus 1996, 50). Finally, what is happening with those who responded to the survey reflects what is happening across many contexts in which an infusion of multiethnic content occurs. Researchers (e.g., Ross 1996; Sleeter 1989; [illegible] 1995) note that teachers in other disciplines--even in those that deal with "human" content such as social studies and language arts--do not seem to fare much better in their use of multiethnic content, in spite of the number of education reforms and school restructuring initiatives introduced over the last 25 years.

Pearson-Davis predicts that the next few years will be critical for the field of drama/theater education (1995, 16). Several pivotal questions that should be addressed remain: What are the connections between teachers' orientations to arts curriculum and to their approaches to multiethnic education? How does a drama teacher move from less complex approaches, such as teaching the culturally different and human relations, to the more complex and comprehensive approach of education that is multicultural and social reconstructionist? Under what circumstances does this shift occur and why? Is this shift necessary for all teachers? How can the field of drama education support teachers in their efforts to teach in multiethnic classrooms and create positive classroom environments? These questions take on special significance because the continuing influx of diverse ethnic groups into the US will increasingly challenge the teaching community to establish within the school environment a sense of inclusion that tells all students their experiences, traditions, hopes, and dreams are worthwhile.

References

American Alliance for Theater & Education (AATE) and Speech Communication Association (SCA). 1990. Teacher Preparation and Certification Standards. Tempe, AZ: AATE.

Banks, James A. 1995. "Multicultural Education: Historical Development, Dimensions, and Practice." Handbook of Research on Multicultural Education. Ed. J. A. Banks and Cherry A. McGee Banks. New York: Macmillan. 3-24.

1994a. An Introduction to Multicultural Education. Boston: Allyn and Bacon.

1994b. Multiethnic Education: Theory and Practice. 3rd Edition. Boston: Allyn and Bacon.

Baruth, Leroy G., and M. Lee Manning. 1992. Multicultural Education of Children and Adolescents. Needham, MA: Allyn and Bacon.

Bedard, Roger. 1992. "The Think Tank on Multi-Cultural Theater Literacy." Youth Theater Journal 7. 1: 20-22.

Boyle-Baise, Marilynne, and Judith Washburn. 1996. "Coalition Building as a Means for Changing Teachers' Cultural Knowledge about Multicultural Education." Teacher Thinking in Cultural Contexts. Ed. Francisco A. Rios. Albany, NY: State U of NY. 308-324.

Campbell, Duane E. 1996. Choosing Democracy: A Practical Guide to Multicultural Education. Englewood Cliffs, NJ: Merrill.

Collins, Georgia, and Renee Sandell. 1992. "The Politics of Multicultural Art Education." Art Education 45: 8-13.

Davidman, Leonard. 1995. "Multicultural Education: A Movement in Search of Meaning and Positive Connections." Multicultural Education 2.3: 8-12.

Eisner, Elliot. 1991. "What Really Counts in Schools." Educational Leadership 48: 10-17.

Fennessey, Sharon. 1995. "Living History Through Drama and Literature." The Reading Teacher 49.1: 16-19.

Fowler, Floyd J. 1993. Survey Research Methods. 2nd ed. Newbury Park, CA: Sage.

Garcia, Lorenzo. 1995. "Meaningful Interactions with Citizen Koerner: A Classroom Teacher." Stage of the Art 7.2: 5-8.

Grant, Carl A., and Walter G. Secada. 1990. "Preparing Teachers for Diversity." Handbook of Research on Teacher Education. Ed. W. R. Houston, M. Haberman, and J. Sikula. New York: Macmillan. 403-422.

Hernandez, Hilda. 1989. Multicultural Education: A Teacher's Guide to Content and Process. Columbus, OH: Merrill.

Hooks, bell, and Cornel West. 1991. Breeaking Bread: Insurgent Lack of Intellectual Life. Boston: South End.

Lazarus, Joan. 1996. "Teaching Teachers: Eight Models of Professional Development in Theater." Youth Theater Journal 10: 36-55.

Liston, Daniel P., and Kenneth M. Zeichner. 1990. "Teacher Education and the Social Context: Issues for Curriculum Development. " American Educational Research Journal 27: 610-38.

[illegible] 1992. Reinventing the Wheel. Washington,D.C.: National Conference of State Legislatures.

[illegible] 1996. "Teaching Concerns Revisited: The Multicultural Dimension." Teacher Thinking in Cultural Contexts. Ed. Francisco A. Rios. Albany, NY: State U of NY. 239-259.

[illegible] 1996. "Teachers', Administrators', and Staffs Implicit Thinking about 'At-Risk' Urban High School Latino Students. " Teacher Thinking in Cultural Contexts. Ed. Francisco A. Rios. Albany, NY: State U of NY. 239-259.

National Education Association (NEA). 1992. Status of the American Teacher 1990-91. Washington, D.C.: NEA, Research Division.

Nieto, Sonia. 1995. "From Brown Heroes and Holidays to Assimilationist Agendas: Reconsidering the Critiques of Multicultural Education. " Multicultural Education. Critical Pedagogy, and the Politics of Difference. Ed. Christine E. Sleeter and Peter L. McLaren. Albany, NY: State U of NY. 191-220.

Ogbu, John L. 1995. "Understanding Cultural Diversity and Learning." Handbook of Research on Multicultural Education. Ed. James A. Banks and Cherry A. McGee Banks. New York: Macmillan. 582-596.

Olneck, Michael R. 1993. Terms of Inclusion: Has Multiculturalism Redefined Equality in American Education?" American Journal of Education 101: 234-260.

Pearson-Davis, Susan. 1993. "Cultural Diversity in Children's Theater and Creative Drama. "Youth Theater Journal 7.4: 3- 1X.

Rios, Francisco A. 1996. "Teachers' Principles of Practice for Teaching in Multicultural Classrooms. " Teacher Thinking in Cultural Contexts. Ed. F. A. Rios. Albany, NY: State U of NY. 129-150.

Shor, Ira, and Paulo Freire. 1987. A Pedagogy for Liberation. South Hadley, MA: Bergin & Garvey.

Sleeter, Christine E., and Carl A. Grant. 1994. Making Choices for Multicultural Education: Five Approaches to Race Class, and Gender. 2nd ed. Columbus, OH: Merrill.

Sleeter, Christine E. 1992. "Restructuring Schools for Multicultural Education." Journal of Teacher Education 43.2: 141-48.

—. [illegible] "[illegible] Multicultural Education Across the Grade Levels and Subject Areas: A Case Study of Wisconsin." Teaching and Teacher Education [illegible]

Stotsky, Sandra. 1995. "Changes in America's Secondary School Literature Programs: Good News and Bad. " Phi Delta Kappan 76: 605-613.

Valli, Linda. 1996. "Learning to Teach in Cross-Cultural Settings: The Significance of Trusting Relations." Teacher Thinking in Cultural Contexts. Ed. Francisco A. Rios. Albany, NY: State U of NY. 282-307.

UNESCO'S TEACHER EDUCATION RESOURCE PACK: A MEANS FOR SCHOOL REFORM THROUGH SCHOOL-BASED STAFF DEVELOPMENT

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1. INTRODUCTION

As the 21 st century is quickly approaching and as technology is changing so rapidly, there is a feeling of pressing urgency for change to occur in all walks of life. The educational field is no exception. It too needs to meet the challenges of our times Educators have to look into the most efficient ways to induce innovations and help schools to meet these challenges.

One of the issues that schools have been facing during the past few years and will be facing for a while is the increased diversity of the student population (Wang, 1995). This diversity ranges from students of different cultural backgrounds, students with health problems, from broken families, teenage pregnancies, drugs, special educational needs, etc...Scools have had to restructure themselves to meet the needs of these students, in particular those with special educational needs, through a process of "progressive Schools have had to restructure themselves to meet the needs of inclusion" (Wang, 1995). Inclusion in parts of the world is a trend and in others it is an actuality (Jangira, 1995). This movement necessitates educators to look into the most effective ways to prepare schools and especially teachers to meet this challenge (Hegarty 1992).

Ultimately it is the teacher who is the agent for implementing any educational change or innovation (Hargreaves, 1994). In order to prepare teachers for change with in the educational system,some feeling service training is a better venue than pre-service training (Fullan 1982; Hegarty 1995; Jangira 1995). There is too much curriculum to be covered in pre-service training and teachers need a certain amount of basic teaching experience before one can initiate innovation (Fullan, 1982). There are many models for inservice training to choose from. When inclusion or catering to special educational needs is the subject for reform, some experts propose (Jangira, 1995; Hegarty, 1992) school-based staff development as the model to be used to achieve the desired change.

The purpose of this paper is to show how school reform can be achieved by school-based staff development using UNESCO's Teacher Education Resource Pack: Special Needs in the Classroom. Although the main aim of the pack is to let teachers reflect upon their assumptions and practices towards students with special needs, it is proving in many parts of the world that teachers actually start to reconsider their assumptions and practices towards all students and not just special needs students, hence initiating a process of change. This paper will give a description of the training package that the Jordanian team has developed for school-based staff development. The features of the training as well as the lessons learned will be highlighted. The last section of this paper will present some reflections on how the strategies of the pack bring together features of effective staff development and prepares teachers not only to meet the needs of special students but also to cope effectively with the process of change.

11. MEANS AND PROCEDURES

A. UNESCO's Teacher Education Resource

The teacher education resource pack: *Special Needs in the Classroom* was developed by UNESCO in response to the requests of many nations who were interested in working towards inclusion in their schools but needed materials to train teachers. The draft materials were read by people in the educational field in many countries. They submitted suggestions, modifications and at times were asked to contribute materials of their own. Between 1990 and 1991, the pack was field tested by a team of resource people from eight countries: Canada, Chile, India, Jordan, Kenya, Malta, Spain and Zimbabwe. The pack was implemented at three different levels: pre-service, in-service and school-based settings. The data collected from the field testing indicated that these materials were not only appropriate for the different cultural settings but also for helping teachers develop attitudes and practices that would meet the needs of *all* pupils. Up till the present, the materials have been translated into many languages and implemented in over fifty countries throughout. Africa, Asia, Latin America, the Caribbean and the Middle East (Ainscow, 1995; Sebba & Ainscow, 1996).

As for the dissemination of the pack in the Middle East, it has been implemented by the Jordanian team in different settings: sub-regional, national, multi-school and school-based. In all of the settings, the strategies of the pack proved how powerful they are in creating an atmosphere of collegiality between the participants and a supportive environment where the participants could attempt change whether on the cognitive or practical level. Of all the venues mentioned above, the majority of the team's work has been in school-based staff development. It has been a rewarding experience to work with a school and see the long term results which can not be seen in the other venues. The chance to follow-up with the schools and work towards the improvement of the process of change in schools is possible mostly in school-based workshops.

B. The training package for school-based staff development

The first school-based workshop was implemented in the same fashion as the workshops in the other venues. One of the trainers, who worked at that school, observed that, although some of the participants attempted to make changes in their practices, they were not as much as was expected. Since the participants were 20% of the staff, their enthusiasm wore off eventually. The changes that persisted were more on the level of their acceptance of student diversity and becoming more flexible in their expectations of student performance. One of the reasons for this outcome might have been that the administration was not very involved during the workshop and did not follow-up sufficiently with the teachers in their attempts to change practices.

When the second school-based workshop was implemented, the trainers introduced some elements into the workshop in hopes of getting better outcomes for the school. The participants were required to do two assignments after being paired up with another colleague so as to give them the opportunity to take the first steps in implementing a new practice. During a follow-up meeting, feedback on the assignments was given to all the participants which encouraged them to try again. The principal of the school wanted the workshop for the purpose of exposing all her staff to the concept of inclusion and student diversity and was an active participant throughout the whole training. She demonstrated her pride in her teachers by decorating the walls of the school with the charts of the teachers' work during the workshop. During the second follow-up meeting, feedback was given on the long-term effects of the workshop.

It was then that the trainers realized how the pack could bring about change in a school not only for the purpose of meeting the needs of special students but also for improving the quality of education for all students. Hence came the idea of developing a training package for school-based staff development using the pack.

Preparatory stage

The trainers meet with the administration of the school to discuss the goals of the workshop, the strategies used, the requirements, the implementation, the content and the expected outcomes. This is an important component of the work with a school. It is at this time that the concept of special needs is discussed and it becomes more clear to the school and the trainers whether the school wants to go in the direction of inclusion and wants to make a commitment in training, following up its teachers and supporting them in their attempts to change practices.

During this time, the main goal of the pack is stated: the participant is given the opportunity to reflect upon his/her attitudes and practices towards special needs students Although this is a primary goal, it is emphasized that while the teacher is learning to cater to their needs by varying his teaching methods, in fact the training will be improving the quality of education for all students. In addition, as the teacher reflects on the life and learning experiences of a student during the training, he will draw conclusions that can be carried back to the classroom.

The five strategies of the pack, which are the pillars of the training, are described Samples of the teaching methods are also highlighted. If the teaching staff of the school is more than forty, how the teachers are selected is also discussed. As an outcome of the first school-based workshop, we emphasize the need to have administrators, heads of sections, coordinators be participants in the workshop for two reasons: they are crucial for the support of the teachers when they attempt changes in practices in their classrooms, but more important, the social and professional barriers between the teachers and the administrators will be broken down during the workshop and the beginnings of a team spirit will emerge.

The additional requirements of the training are also discussed:

1) the participants are expected to do two out of three assignments which involve implementation of new practices in their classrooms. They are paired up in teams of twos or threes to do so.

2) the teachers have to attend two follow-up meetings during the semester following the initial training. The first meeting is for giving the participants feedback on the assignments, and the second is for evaluating the long-term effects of the workshop.

As for the implementation of the workshop, the school is given a choice between five consecutive days or three consecutive days and two days distributed during the semester following the initial training The first three days have to be consecutive so as to insure that a team spirit and a certain amount of cohesiveness between the participants is achieved.

The content of the workshop is discussed and the materials of the pack are presented. Although the programs made for school-based workshops are very similar to each other, the choice of some units varies according to the resources of the school, the previous experiences of the staff, the relationship with parents and the community and other related matters...

The expected outcomes are restated, the main ones being a change of attitudes and practices, the breaking down of social and professional barriers between the participants, as well as a large variety of teaching strategies that can be taken back to the classrooms, an item which is always of crucial importance to all schools.

At this point a contract is signed between the trainers and the school. The contract describes in detail what is expected of each party and includes the administrative matters also. In the most recent contracts, two clauses have been added: one, whereby the participation of some of the administrators is requested; *two* whereby the school will hold regular meetings with the participants throughout the whole school year.

The purpose of these meetings being to discuss issues related to the content of the pack, to share experiences of new practice and support each other in problem solving.

Implementation stage:

1) The setting

One of the main assumptions of the workshop is that all teaching and learning situations are the same irrespective of the age of the students. So right from the beginning of the workshop, the participants are put into the atmosphere of being in a classroom. Ground rules are put for classroom management purposes. It is explicitly stated that they will be students throughout the workshop and just like any class they will have homework, and rather than taking an exam, they will have to evaluate the workshop and their own learning on a daily basis and at the end of the training.

2) The content of the workshop

The content of the training is taken from and organized according to the resource pack. It has four modules, each with a specific theme. Some of the units of each module are then implemented. The themes of the modules are:

Module *1*: *An introduction to 'Special Needs in the Classroom"*

In this module the participants are asked to set their goals, to decide on an evaluation policy and to look at the process of learning.

Module *2: Special Needs. Definitions and Responses*

Here an attempt at defining special needs is made as well as studying what factors affect the learning process. The unit on the needs of teachers is always done and is an important factor affecting the social atmosphere between the teachers and between the trainers and the teachers.

Module *3: Towards Effective Schools for All*

Practices inside the classroom are the focus of this module.

Module *4: Help and Support*

By this time, many of the participants are weighed down by the realization of the responsibilities they should bare and their desire to try new methods. The theme of help and support is welcomed, but more important their willingness to work with other teachers and to support each other is achieved.

3) Features of the workshop

a) the five strategies of the pack:

The second assumption of the workshop is that for teaching to be effective, the following five strategies have to implemented. A challenge is put forth to the participants that at the end of the workshop they can hold the trainers accountable for whether the strategies were implemented during the training or not. All of the teaching methods and activities throughout the workshop have to fulfil the following:

* *Active learning.* activities are planned so that the participants play an active role in the learning

* *Negotiation of objectives.* participants are given the opportunity to take part in making decisions concerning matters related to them.

* *Demonstration, practice and feed back:* throughout the workshop, the trainers demonstrate practices that can be taken back to the participant's classrooms. They are also given the chance to practice new methods and supportive feedback is given by their colleagues and the trainers.

* *Continuous evaluation.* The participants are asked to evaluate the activities on a daily basis. They are also encouraged to evaluate their own learning through learning journals.

* *Help and support:* The participants explore the sources for getting support in their new endeavors.

b) additional features:

* *Reflection and collaboration.* these two processes are fundamental features of the training based on the pack. Many opportunities are given for the participants to work together, share their experiences, reflect upon them, come up with new ideas, modify, etc... It is through these activities that teachers are able to come to a better understanding of student diversity and envisage new ways of catering to their needs within the context of their classrooms and the school (Ainscow, 1995).

* *breaking the barriers between the participants.* this is often a difficult and sensitive issue when working within a school and it is of utmost importance in order to reach an atmosphere where colleagues can share experiences and work together and in the end reach a team spirit within the school. At the onset of the workshop, the participants are always

seated according to their friendships or departments or subject area. These groups are more like "cliques" and their members refuse openly to work with other colleagues. Even though the groups are mixed randomly at every session, there are always participants who will sneak to join a friend in another group and the trainers have to readjust the groups accordingly. Unlike other workshop venues where after the third day participants mix on their own, in school-based workshops the rearrangement of groups has to be done always by the trainers. The participants are upset at first end sometimes offended, but in the end they understand the behind it and appreciate the fact that they got to know colleagues whom they have been with for years and have never really known.

- *ground rules and a "democratic way".* although the participants are given the ground rules right from the beginning, it takes at least two days before they accept and abide by some of the rules, such as listening to others' opinions, working or commenting within the time limits, encouraging each other's work, accepting opinions different to their own, etc...

- *homework.* as mentioned before, this item was added to the school-based workshops in order to fulfil the third strategy of the pack, whereby participants are given the opportunity to try new practices within a supportive environment. The participants are given the chance to choose two assignments from three. For two of the assignments, they are required to plan and/or execute them with another colleague of their choice.

- *additional teaching methods.* The teacher's guide for the UNESCO pack has a wide variety of methods that trainers can use to fulfil the five strategies mentioned above and which help to take the participant from being an inactive recipient learner to an active [earner who takes responsibility of his learning. In addition to these methods, the trainers have tried to use others such as role-playing, games, competitions, drawing and making posters, worksheets, and making observation checklists. Different ways of reading materials are done such as reading on one's own with or without guided questions, reading in the jigsaw method, one reads out loud to a group of four or five, one reads out loud to all of the participants, and reading at home with a worksheet on the material. In other tasks such as presenting group. Work or daily evaluation, they are also done in at least three to four different ways during the five days of training. The purpose of this is so that they can experience which methods they prefer and which they do not and better understand why they need to vary methods to cater to the needs of a larger number of students in their classrooms.

At first, the written materials distributed were all from the pack. Gradually, the trainers have been making additional handouts such as stories from our own culture, descriptions of what end how to use certain teaching methods like active listening, cooperative learning and learning journals.

- *trainers as models of collaborative teaching.* this has been a powerful feature of the training. Not only do they see the trainers helping each other with the menial tasks of hanging charts,distributing papers, helping participants get settled into groups, but they also see how the distribution of roles is orchestrated, how conferences are made on the spot to deal with a specific problem, how they interject comments during debriefings and discussions, etc...

- *training for peer coaching.* by the end of the workshop, most of the participants have accepted the idea of working together and, from the model of the trainers, realize that it is not necessarily a threatening situation. However seeing it is one thing and practicing it is another. Hence the decision to incorporate some training in the workshop that might help them in applying it. On three different occasions, the participants are asked to develop an observation checklist, observe colleagues with the checklist and then give feedback to them based on the checklist. The latter part of the work is the hardest as it is difficult for them to distinguish between feedback and evaluative judgements. However, when a judgement is given, it discussed with the whole group and suggestions are put forth for appropriate feedback.

- *presenting ideas briefly and concisely:* limiting a comment, question or a presentation of a group's work to one or two minutes is a skill most participants find difficult. Schmocker(1996)points out the necessity of training teachers in this skill as it helps to increase concentration and clarity of expression. It is an item that we have added to our agenda.

- *effective use of time* the Importance of timing activities, sticking to a program and a timetable, is an area that many teachers do not appreciate in our society. This is another area that we have also given some at-tension.

- *distribution of participants' work:* whenever the occasion arises that the participants' work can be copied and distributed, the trainers have been doing so. This is one way of giving the participants the feeling that they are contributing something valuable to the workshop. Sometimes, the trainers will show them what others did in previous workshops. This gives them another perspective of what is being discussed or confirms to them that there are many similar elements in the teaching process wherever one is.

4) Outcomes of the school-based workshops:

No matter how difficult the circumstances of the workshop may be, such as a crowded area, no heat in the winter or extreme heat in the summer, lack of materials to work with, total absence of administrative support, the breaking down of photocopying machines, the presence of a few participants who do not want to attend or who constantly interrupt and complain, the strategies of the pack are so powerful that in the end they override these difficulties. This experience has given the trainers a sense of confidence that no matter what the situation is, there will always be positive outcomes in the end.

The emotions are intense by the end of the workshop, especially when the five days are consecutive. A sense of fatigue is quite observable. For many, the process of change has already started; for others, it is more a process of questioning of what one believes in or practices; for some, there is a sense of confusion between what they have been doing and what they now think they should by doing; and for a very few, it is an extremely shaking and anxious experience. However, these intense emotions are mixed with a sense of enthusiasm, renewal, cohesiveness and sometimes elation. The name of the group announced at the end of the final session confirms the individuality and identity of the group. As it is very easy to bump into people you know in Amman, both trainers have experienced teachers coming up and saying: "Remember me, I'm from the so and so group." During the last teacher's conference, which is run by the Private Schools' Council, several teachers came to us and were proud to say that they were presenting workshops based on the assignments of our workshop. In schools where the teaching staff is over 40 and only a part of the staff could attend the workshop, the administrators and other teachers wonder why this workshop is so different from others. The sense of enthusiasm and collegiality between the teachers is not something usually observed at the end of a Following are some of the outcomes of school-based workshops:

- *an acceptance of student diversity and in particular a change of attitudes towards students with special needs* a good part of this outcome is due to the fact that they realize what it is like to be a student and they observe how the trainers accept them and cater to their needs. The beauty of this process is that the participants never fail to act like students. They chat while the trainers talk, they misunderstand instructions, they reject some of the procedures such as reading out loud or writing in their learning journals and object very frankly to being given homework, they get fidgety at the end of the day, they are happy. when their mistakes are not pointed out in front the others, they try to sneak off to be in another group and are proud when their group's work is applauded by all. This process is so essential for them to understand student behavior. Throughout the workshop after some of these behaviors occur,the trainers point out humorously that they are humorously that they are acting like their students and often ask them what they would do if their students behaved in the same way. One of the activities of the final session is to have the teachers reflect on what it was like to be a student and what have they learned from this concerning their own students.

- *a change in practices of the teachers.* one of the major outcomes and the most enduring one is the flexibility in their expectations of student performance. This always comes in the evaluation forms, in the last follow-up meeting and in their assignments on problem solving of an academic or behavioral problem with a student. The most consistent feedback from the administration of the schools ;c. how L. the teachers back from the a ministration o f the schools is now much the teachers are enthusiastic in trying out new methods and in particular in working with other teachers and across subjects.

- *a change of attitudes towards parent involvement.* after seeing the fruits of working with other teachers and realizing that they cannot cater to all the needs of a student, there is a seeking a partnership with the parents of the students. Again this comes from the feedback from the more positive attitude on administration and the problem solving assignments.

- *an increased awareness of teachers' needs.* many issues concerning the teaching/learning process are discussed throughout the workshop. These discussions bring to light what types of problems they face as part of the teaching staff of a particular school or as individuals. As they share their experiences, reflect on them and draw conclusions, they realize what their needs are to do a proper job what their own limitations or capabilities are and, what are the available resources in the school that can support them in their work.

- *effects on school administration:* For those schools who really desire to work towards the acceptance of student diversity and catering to special needs' students, the UNESCO workshop lays the ground work for them. They find that they and the teachers are talking a common language, that they understand each other, and that there is a willingness to look into several options for solving problems. Some of the administrations realize that the process of change that started with the workshop will develop and continue in as much as they follow-up and support their teachers with these changes, otherwise the initial outcomes can wane off.

- *effects on the trainers.* the experience of working in the venue of school based staff development with the UNESCO pack has been a most rewarding experience. If it were not to maintain a certain clarify between trainers and teachers in this paper, the term trainers should have been replaced by teachers. What the pack aims for teachers to collaborate, to grow professionally through a process of reflection and fine tuning of teaching methods(Ainscow, 1995), to support each other and recognize the potentials and limitations of each other in order to meet the needs of their students, has been achieved with us. The repeated work with schools has given us a good idea of what teachers need and what schools can do to cater to special educational needs in our context. Now is a turning point in our work in that we can focus more on developing inside the schools ways to support teachers' endeavors and make the outcomes more lasting ones.

5) **Future aspirations:**

In fear of sounding too ambitious and if the time and opportunity arises, the following are some areas the we would like to develop for school-based training using the UNESCO pack:

a) a more systematic way of collecting evaluative data from the administrations of the schools.

b) a more systematic method for follow-up and support of teachers during the school year that follows the initial training

c) a team within the school, made up of a few participants and administrators, who would organize meetings with the purpose of sharing experiences, developing the methods learned in the training, discussing issues related to the principles of inclusion and special needs' students, and problem solving.

d) more stories and materials from our culture to incorporate into the materials of the pack.

e) compiling samples of good practices from the participants into a resource book.

f) recruiting trainers in order to meet the demands of schools for staff development.

111. LESSONS LEARNED

This section of the paper will present lessons learned and conclusions reached by the trainers in relation to participants, implementation, administration and follow-up.

A. Participants

One of the main features of the workshop is the breaking down of barriers between the participants and achieving a team spirit or a sense of cohesiveness. This is a preliminary condition for school reform because change is a social process (Fullan, 1982). Changing practices involves taking risks (Ainscow, 1596) and unless there is a supportive and non-judgmental environment between those involved in making changes, innovation will be hard to achieve (Lang, McBeath, & Hebert, 1995). The workshop has laid the groundwork and the school just has to take off from there.

With the breaking down of social barriers and the building of positive social relationships, first year teachers and new teachers to the school have always given feedback on how comfortable they feel about starting work at the school after participating in the workshop. Clark and Cutler(1990)point out how difficult it is at for new teachers and first year teachers to fit in socially with the other teachers.

Professionally, they feel threatened and have to prove themselves. The social processes of the workshop and the pairing up of teachers for the assignments are factors that facilitate the socialization of these teachers into the new school environment. In fact, by the third day one rarely observes loners during the breaks.

As teachers participate in discussions on the teaching/learning process, indirectly they are getting feedback on their own abilities to teach which increases their awareness of what is going on in their classrooms. This gives teachers a sense of empowerment which helps them make intelligent choices concerning their practices (Clark &Cutler, 1990).

Another factor that helps teachers develop their abilities to recall, analyse, evaluate is keeping a learning journal (Lang, McBeath, &Hebert, 1995). At the end of each day, the participants are allotted some time to register their thoughts in a learning journal. Although the purpose of the learning journal is explained at the beginning of the workshop and a handout is distributed, many participants find this to be a difficult task.

From the assignments the teachers implemented, the trainers noticed creativity in their attempts to meet the needs of special students by making some modifications to the

904

curriculum,changes is their teaching methods and changing the level of their expectations of their students. This is what Hegarty(1992) suggests teachers need to be trained to do so as to cater to student diversity in their classrooms.

Creativity of the teachers was also demonstrated in some of the assignments when teachers of different subject areas, such as science and physical education or Arabic end art, integrated both subjects for the teaching of a unit and in so doing enriching the teaching of both subjects.

The degree of acceptance by the participants of the methods and ideas of the pack depends on whether the participants were told to attend the workshop as opposed to them choosing to attend or are chosen to attend as a privilege.

B. Implementation

We have learned how important the preparatory stage is for the success of the workshop. As the goals, methods and content of the pack are discussed ,the needs, structure and resources of the school becomes clearer to the trainers, which helps in designing the content of the workshop. In addition, knowing whether the school lays more importance to the concept of inclusion and catering for special needs' students or to the concept of Improving the quality of education for all is also important. The difference between the two is subtle, but it makes a difference on where the emphasis is put.

When we compare the results between school-based training and multi-school training, the former has been more effective in achieving changes in practices. This is confirmed by Clark and Culture (1990) who state that if a school is striving for improvement and innovation, it has to work towards creating a cohesive group, where teachers work together and not in isolation. This cannot be achieved by training a select few but by taking on a school-wide approach.

C. Administration and follow-up

Two areas that are closely linked to each other and that need more work on our pert are getting the administrations of the schools to participate in the workshops and developing a more systematic way for the administration to follow-up and support their staff in attempting innovations.

A clause has been included in the contract which requests the participation of the principal or coordinators or heads of departments in the workshop, however this has not been sufficient to get them to participate. When planning the workshop with the school, this is discussed and agreed upon. However, only two principals have done so. It is due to the positive effect of their presence that we have been trying to involve administrators, not only for building a good relationship with their teachers but also for follow-up purposes.

Fullan (1982) states that one of the reasons in-service training may fail is the lack of follow-up of teachers to attempt new practices. When training teachers for the purpose of inclusion, Udvare-Solner (1995) stipulates that few teachers can put into practice new methods on their own Fullan (1982) proposes that an outsider who works with teachers to help with the process of translating new learning into practice may be a successful measure for school reform. Jangira (1995) cites a school in India that used the UNESCO pack over a period of two years so that the reform process in the school was a gradual one. We have included assignments and follow-up meetings in school-based workshops for the purpose of helping the teachers start new practices and encouraging them in their attempts. However, we may have to consider other options of involvement with the school for more than one semester so as to insure more lasting changes.

IV. REFLECTIONS

When reviewing some of the literature on staff development, one realizes why the UNESCO Teacher Education Resource Pack is proving to be a successful means for achieving school reform in relation to students with special needs. Fullan (1982) suggests that professional development of teachers should focus on two levels: the cognitive and the practical. The goal of the pack is exactly that: to give the participant the opportunity to reflect on his beliefs and his practices in relation to special needs' students.

Two main assumptions of the pack are that reflection and collaboration should go hand in hand to achieve innovation (Ainscow, 1995). Reflection is a process that many are advocating as a necessary component of staff development programs. Clark and Cutler (1990)call for "reflective practitioners". Although teachers should be trained in teaching skills, they need to be given the opportunities to think about teaching situations, analyze what they do and how this affects the learning of their students. Both Fullan (1982) and Lang, Beach and Hebert (1995) describe reflection as a constant going back and forth from theory to practice and practice to theory. Hence the notion that through reflection, staff development is an ongoing process.

This process of continuous growth can not be done by a teacher alone. It requires a supportive, non-threatening environment (Lang, Beach &Hebert, 1995) where teachers share experiences, solve problems together, and experiment with new methods. Fullan (1982) cites Joyce and Showers' five basic components of staff development: theory, demonstration, practice, feedback, and application with peer coaching, all of which are essential features of the pack.

In the final analysis, if quality education is the goal of effective schools, Clark and Cutler (1990) state: "The nature of the relationships among the adults who inhabit a school has more to do with a school's quality and character, the accomplishments of its pupils, and the professionalism of its teachers than does any other factor." And that is one of the aims that the UNESCO pack strives for.

References

Ainscow, M., Ahuja, A., Chen, Y., Comuzzi, N., Homad, C. D. and Echeita, G. (1995). UNESCO Teacher Education Project: "Special Needs in the Classroom", *Prospects, 25, 273-286.*

Clark, D.C, and Cutler, B. R. (1990). *Teaching. An Introduction.*. New York: Harcourt Brace Jovanovich.

Fullan, M. (1982). *The Meaning of Educational Change.* New York: Teachers College Press, Columbia University.

Hargreaves, A. *(1994). Changing Teachers, Changing Times.* London: Cassell.

Hegarty, S. (1992). *Educating Children and Young People with Disabilities. Principles and the Review of Practice.* Paris: UNESCO.

Jangira, N,K, (1995). Rethinking Teacher Education, *Prospects,* 25, 261-272

Schmoker, M. (1996). *Results The Key' to Continuous School Improvement.* Association for Supervision and Curriculum Development.

Sebba, J. and Ainscow, M. (1996). International Developments in Inclusive Schooling, *Cambridge Journal of Education, 26, 5-18.*

Udvari-Solner, A. (1996). Theoretical Influences on the Establishment of Inclusive Practices, *Cambridge Journal of Education,* 26, 101-120.

Wang, M. C. (1995). Serving Students with Special Needs: Equity and Access, *Prospects,* 25, 287-298

THE THIRTY SETTLEMENT PROJECT

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The Thirty Settlements Project- The Central Concepts

The Thirty Settlements Project is one of the central projects run by the Ministry of Education. It is a comprehensive intervention program operating in the education systems of some 35 communities in Israel.

The settlements were chosen because the Ministry considered that they had not yet realized to the full their educational potential. These settlements are very heterogeneous, ranging from the very large (with populations in excess of 150,000) to the very small, include Jewish, Arab, and Druze communities, are spread all over the country, and represent some 20% of the total Israeli population.

The Ministry of Education issued a public tender to bodies such as universities, colleges, and educational consultants. The tender invited proposals for "holistic" intervention that, with the cooperation of the local education systems, would lead to improvements in their functioning. It was assumed that the goals and programs would differ from community to community, dependent on their unique characteristics. Nonetheless, common goals were also set, such as raising learning attainment levels, elimination of discriminatory or stigmatizing frameworks, developing local educational leadership, and pooling of resources.

In addition to applying to external bodies via the tender, units within the Ministry were also approached to propose such programs. Finally, twelve external bodies were selected, as well as a number of Ministry units, and together, these were offered to the local systems to act as cooperative intervention agents. Each settlement set up a steering committee, chaired by the head of the local authority

Of all the Ministry of Education's projects, the Thirty Settlements Project is unique in terms of its approach to the processes of change in education systems. The project focuses on two central concepts, "rebuilding" and "holistic viewpoint." The integration of these two concepts creates a special strategy for change, "in opposition" to the classic organizational culture of a centralized education system, such as that of the state of Israel. Herein is entailed the main chance for real change, but also the weak points that are liable to afflict the project.

The Concept of "Rebuilding"

1. Until the dominant strategy for bringing about change in centralized education systems was called "Research, Development and Diffusion (RD&D)." According to this approach, some center conducts research and discovers new knowledge (such as in the field of cognitive psychology). As a result of this basic research, educational applications are developed (such as new pedagogical methods), the development is carried out in the central branch of the Ministry of Education, or at a university, and after its conclusion, preparations are made to distribute the new ideas to the local systems by means of leaflets, seminars, new educational materials, and so on.

During the seventies, researchers who were specializing in the subject began to introduce changes, noting the fact that the desired change was frequently not accomplished, or was incorporated in the system in a distorted fashion. It therefore became apparent that the RD&D approach was inefficient. One of the chief researchers in the field was Ernest House. He tried to characterize the reasons for the failure of RD&D. "The RD&D approach deprives the professionals in the field the power of initiative. This approach is only justified if one believes that the person in the field is passive and will not take the initiative himself."

The RD&D paradigm immediately places the person in the field in the position of a consumer to whom one sells a product, and who only has the choice of buying or rejecting. In general, he exerts the only power that remains to him—by not buying.

In other words, the nature of the communications between the center and the field, mainly unidirectional from the top down, and the distribution of power from the (strong) center to the (weak) field, causes the dissemination of the desired change to fail.

2. This analysis brought many groups to accept the thesis that significant change can only occur when the communications are two-way and symmetrical and when the field is empowered. This direction of this thinking represented a principal emphasis in the movement that developed in the eighties- "Rebuilding" as a basis for reform in education.

According to this concept, a change is not brought to the field, but is wrought (at least in part) by the field itself. This has two prominent advantages: first, every local education system knows its own special problems better than the far-off center, so there is a reasonable chance that the changes it proposes will be relevant. Second, the empowered field feels responsible for the changes it has itself proposed, and therefore it has a higher commitment to carrying them out successfully than when the proposal comes from above.

One can note two aspects of the concept of "Rebuilding," in the sense discussed here:

a. It is an act of decentralization—the center declares a reform and disburses much authority to the field (the term "field" also includes parents),

b. It involves cooperation between a settlement and an academic or research agent this idea is based on the idea of "School/University Partnership," according to which communication networks are set up between local education systems (or individual schools) and external centers that carry out research or consultation (they are often, but not necessarily, sited in universities). The intention is not the well-known situation in which a university "exploits" the field as a site or laboratory for its research. Here, there is true cooperation, anchored in a formal agreement that determines full partnership in decision-making and the policy to be followed in the local system.

Only thus is it possible to speak of Rebuilding. The academic center contributes its expertise and ability "to drum to a different beat," to challenge the basic assumptions of the system, and to offer alternative approaches, and it is not part of the existing hierarchy of authority. It has no formal authority to impose in will on the local system.

Rebuilding has many strategic advantages for bringing about changes. However, it has one conspicuous disadvantage: it conflicts with the order of power-sharing deeply rooted in the system's organizational culture, and so invites opposition and hostile actions from those whose power is reduced under the new conditions. It is worth recalling another strategy intended to overcome the difficulties deriving from the RD&D methods. I refer to "Improved RD&D," formulated in this country by Shevah Eden in his book, "Carrying out Changes in Education" (1978). The idea is to create a new role- instructor, moderator, liaison—who acts as representative for the change developed by the center. He (or she) comes to the field and takes into account its special properties when he introduces the change, learns from the difficulties encountered, and provides feedback to the rest of the center where the program is suitably corrected. He then returns to the field with the revised program, and so on. The instructional frameworks of various units in the college are built on this concept.

The Thirty Settlements project has not favored "Rebuilding" over "Improved RD&D," and, in reality, has tried out each method in different communities.

The Concept of "Holism"

Another researcher who tried to explain the failure of the RD&D strategy in education is Sarson, in his classic book, "The Culture of School and the Problem of Change." His explanation was different: he claimed there is a tendency to try to bring about individual changes without taking the overall culture of the school into account. The agent of the change tries to alter one component within this culture, while leaving all the other components in place. The school culture therefore rejects the proposed change.

Sarson maintains that if one wishes to bring about a change in a school, one must try to change the overall culture in a comprehensive manner. In other words, "a change must be holistic, altering the school culture from condition A to condition B": the problem is that such a change require a great investment of energy, and since it involves many changes, carries the danger of dissipating that energy. That is to say, the investment in a change in any one direction will not reach "critical mass."

The solution is to identify, from among all the elements; the most central and basic one that constitutes the core that unifies all of the system's culture. One should then invest most of the effort in changing it. In other words, the holistic approach proposes that one choose which elements not to tackle, In Sarson's opinion, by focusing on the central element, the whole culture will undergo change.

The difference between the two strategies is that, in the first, the agent attempting the change chooses the element most important to him from among all the others, while in the second, the element is chosen with regard to the overall culture of the system, and is designed to lead to changes in all the components connected to this culture.

Thus, the term "holism" is interpreted not as an attempt to deal with everything, but as a cultural, systemic approach that focuses on the cardinal element.

The Strategy for Change Adopted by the Thirty Settlements Project

The Thirty Settlements Project is run according to the following principles:

909

1. Each settlement selected for the project is offered an intervention agent.
2. This agent is supposed to work in cooperation with the local agents.
3. The intervening agent identifies central problems in the system and proposes a program of action to rectify the situation.
4. This program must be agreed to by the local steering committee, that will also follow the developments as the program is in operation.
5. The program is headed by the head of the local authority
6. In order to actualize this program, efforts will be made to pool educational resources.
7. As an integral part of the program, the intervener will offer ways to guarantee that the changes have a lasting effect after the project comes to an end.
8. In most of the settlements, the intervening agent is external (university, college, private company, public organization dealing with education, and so on).
9. In a number of places (Beer-Sheva, Bat-Yam, Rosh Ha'Ayyin, Or-Yehuda, Givat Ze'ev, and Neve Ya'akov in Jerusalem) the intervening agent is internal, that is a unit or representative group from the Ministry of Education.

The above nine principles indicate, in fact, the way in which the Thirty Settlements project attempts to carry out and combine the theoretical ideas we have described regarding Rebuilding and Holism. First, the project places the local education system and head of the local authority at the center of the general effort. This finds expression, first, in the name given to the project, and in its relationship to the settlements period Second, principles 5 and 6 dictate that the head of the local authority will chair the steering committee, and that efforts will be made to pool community resources for the benefit of the project. The term Holism, in its focused and limited meaning has guided us, as indicated in principle 3, that actually expresses in the phrase "identifies central problems in the system," the idea of concentrating on a cardinal element.

In the settlements working with an external agent (principles 1 to 8), emphasis is placed on the cooperation between the academic agent and the local ones. Complete cooperation is stressed in principle 2, while the authorization and follow-up of the steering committee (principle 4) indicate the desirable empowerment of the local agents, as required by the concept of Rebuilding. Reinforcement of this trend to empowerment is suggested by principle 7, that refers to preserving the effect after the external agent has departed. Here there is an assumption that, with the departure of the external agent, complete responsibility for continued operations devolves on the local agents, in the full sense of the term.

The concept of Improved RD&D is contained in principle 9: the assumption here is that when representatives of the Ministry take on the responsibility of leading the project for change, they act decisively. Their formal authority derives from the Ministry's accepted lines of communication and instructional forces. The reason we did not make a decisive choice between Rebuilding and Improved RD&D, is that we do not believe there is any clear evidence that one of the two strategies is more efficient. (Although we wanted the division of the two strategies between the settlements to be more equal, a lack of sufficient Ministry units, which could accept responsibility for intervention, prevented this happening.) When the project finally ends, it will be interesting to see if conclusions can be drawn regarding this matter.

Examples of the Running of Strategies for Change in the Settlements

The Thirty Settlements Project is in full swing. It is too early to draw hard and fast conclusions from what is happening in the field. The project is also very fluid: in a certain settlement we thought the program was about to fail, when a sudden turn-about occurred. In another place, we thought the program was proceeding well, and major problems have suddenly appeared

Nevertheless, we would like to present four examples, all from different settlements that demonstrate various aspects of the theoretical problems that we discussed. These examples will help the reader to have, at least, a partial sense of the project as it is in midstream.

1. The Holistic Approach

A. **This is a model of intervention spread throughout a whole community education system and dealing with one central subject** –transforming the mission of immigrant absorption into a lever for promoting growth in the urban education system following the wave of immigration in recent years. The immigrant pupils comprised 27% of the student population in the town, when the intervening body enter the picture, In addition, it is estimated that during the next few years, the town will absorb many more new citizens (immigrants and veterans). Realizing the fact that the absorption of a high proportion of new inhabitants can bring about a major (positive) change in the system, if it is properly prepared, provided the goal for the model for intervention.

The aim of the intervening agent focused on changing the local culture from a situation in which the town kept having to play catch-up after changes resulting from the rapidly increasing population, to a situation in which changes were expected, identified, and prepared-for in advance. Understanding that the town was sure to continue to absorb masses of new citizens determined the decision of the intervening agent to invest greatly in developing the local infrastructure (manpower, work plans, equipment, etc.) and to provide a solid basis for the new operating methods of the local subsystems in order to create continuity after the end of the program.

The method of development is based on the principle that the existence of a shared focal point, shared by all the education systems in the town, will be an essential factor for the fact that success in each one of them will link up with success in others and create a lever for the flourishing of the overall system. Therefore, the method of operation that was chosen included parallel working in a considerable number of sectors.

Dealing with immigrant absorption is a direct objective for the intervener, while being, at the same time, an exemplary means for transmitting superior work tools, improved work plans, and a better trained work force all this towards developing an infrastructure that will allow for the continued efficient absorption of new citizens (immigrants and veterans) after the intervener completes the assignment.

The activities involved in the development of the infrastructure include communicating theoretic tools by means of instances not connected with the

911

place, and by tackling the problems arising in local personal experiences by means of the new techniques.

A central strategy involves the mapping of the whole system connected with education and immigrant absorption in education, in order to learn who are the policy and decision-makers. This makes it easier to create a tool to review the current situation, and to determine further goals and the direction in which activities should proceed. The mapping is also intended to give the town's decision makers tools to improve the decision making processes, and provide initial data with which to compare the data to be collected later on.

In addition, the intervener acts to develop procedures for renewal—parallel learning structures at the urban level including a number of forums in each of which there are holders of specific offices in the town. The participants in the forums meet to study the complex problems jointly, to re-evaluate them, to reinforce the connections between the office holders, and as support and consultation groups. Each forum is helped by part of the mapping, according to its area of interest.

The following is an example of a two-stage intervention dealing directly with immigrant absorption while, at the same time, contributing to the acquiring of better work tools. A framework was developed for recruitment, organizing, assignment, training, and follow-up of "bridges between cultures" in schools and kindergartens. This complex system creates a new urban network, the quality of the work of which is guaranteed. At the same time, it provides a means for the further development of tools to ensure quality management of the work force.

Other areas in which the intervener operates include:

1. **In schools**: personal help and advisory services for the head, an absorption team, inter-cultural bridging, encouraging cultural continuation and use of the mother tongue.

2. **In kindergartens with at least nine immigrant children**: in each kindergarten a cultural worker operates to create bridges with the appropriate immigrant group The kindergarten teacher sits on the "Infancy" forum, while her assistant takes a special course in the teachers' seminar. Work is undertaken with the parents.

3. **In the further education system**: there are study centers to complement the regular teaching system by means of intensive activities designed to improve the learning and social state of immigrant children in danger of dropping out. Advice and information services are provided for immigrant youth and their parents regarding planning for the future and for professional training.

As a means of helping to rehabilitate immigrant youth who have dropped out of the education system: children selected for the program learn, in the first stage, just the following subjects: the mother tongue, Hebrew, English, history, and mathematics. Only the Hebrew teacher does not speak the children's mother tongue. Another program involves a special study track allowing graduates to receive a diploma as a sports instructor for alienated immigrant youth. The intervener offers opportunities for excellence by running programs such as a school for excellence in athletics, to improve the status of immigrant youth (the teachers are mostly from the same country of origin). A center for research studies by outstanding immigrant youth has also been set up, with teams of veteran immigrants, dealing with subjects relevant to the community.

In parallel, there are various activities in a significant number of sectors, centering on the shared locus of handling the mission of absorption, such that the effect of each will combine with those of the others to create a perceptible and significant momentum in the local system.

B. This model of intervention focuses on handling two topics only, as a means of bringing about a general change in the local culture.

After investigating the needs of the particular settlement, the intervener diagnosed a property of the local culture as a lack of motivation and lack of individual self-belief—but also a general lack of belief, held by parents, the community, and, especially, the teachers. Creating a change in the local culture requires that personal abilities be demonstrated, as a result of the burgeoning of a sense of personal responsibility for making achievements and a positive motivation for acquiring education.

The strategy adopted by the intervener involved focusing on two subjects only, diagnosed as the most significant in the community. It was assumed that success regarding these two would influence the whole community and help solve other problems uncovered by the survey of needs. This follows the holistic approach discussed earlier.

The intervener has put most of the effort first, into increasing the number of students entitled to a Bagrut (matriculation) diploma, and second, on ensuring the reading skills of every student. The work at both the beginning and end of the process has been highly intensive and applied directly to the pupils. Those included in less intensive activities include the teachers, the parents of the pupils participating in the two programs, and on the educational management in the settlement.

In the first year of the project, the intervener discovered that the school involved intended to submit only one pupil for the bagrut examination. He decided to take about twenty 12th grade pupils who had not been planned to take the bagrut, and gave them intensive instruction in each of the subjects on the curriculum separately, outside the school environs and in a prestigious place This is in line with the view that a change in the learning environment is required for a dramatic effect on a graduate's success. To start with, the pupils studied for four hours per day only the subject they feared the most mathematics. After they had had an internal exam, they moved on to learn English intensively, while continuing to study mathematics for two hours per week. This approach was followed for five subjects. The number of hours per day increased prior to the formal examinations, culminating in concentrated, closed, study camps in which they studied from morning to night. The pupils then took their bagrut examinations on the due dates.

Initially, the teachers in the school were highly suspicious of the program and even tried to cause it to fail. Nevertheless, they followed the progress of the pupils with interest. Later on, interested teachers were invited to study in an external framework. A change took place in the sense of expectation of both teachers and pupils, and the school decided to submit a significantly greater number of pupils for the bagrut in the following year. The work of the intervener with the parents of the participating pupils started even before they began their studies. A representative of the intervening agent visited every home in order to "reveal" to the parents the possibilities for success in the bagrut and to convince the parents of the importance of such success, of the need to release their children from their share in household duties, and to support them in their intensive studies prior to the exams. During the months of preparation, meetings with the parents were convened, so they could hear about the progress being made, and learn how to provide their children with suitable support. The involvement of the parents in their children's studies represents a major revolution in this community.

One can view this revolution as an example of Rebuilding, in that power was redistributed to include the parents. The intervener continues to follow-up the pupils' progress with a view to completing their education, and to preparing them as young leaders in the community—as a future cadre of teachers in the community, in order to significantly enlarge the number of teachers who are local residents (today, of 123 teachers, only 9 are residents), and thus to lead to greater local independence in the education of the young.

As noted above, the second of the two areas on which the intervener concentrated was that of acquiring fundamental reading skills. Since it became clear that many pupils lack reading skills, the intervener collected suitable literature, according to the needs of the school, and, using a phonetic approach, developed specially understandable learning material based on pictures and topics relevant to the lives of the children. The program operates in 2nd grade classes in which the children are not yet reading. Assistant teachers have been added to these classes, and the pupils learn in study groups, rather than by the frontal method used up till now. Also, pupils from the 3rd grade having difficulty are being given reinforcement in learning centers run by the intervener after school hours.

Graduates of the bagrut program and good 12th graders teach in these centers. This gives them some recompense and encourages them to take up teaching. In addition, they constitute a model for the younger pupils to emulate. There is center for learning in each school. Four of the elementary school teachers in the settlement guide the work in the centers. Those teachers who have reading programs in their classes are receiving close instruction on how to teach reading skills, while also learning the methodology of teaching study groups. In addition, there are further education courses in one of the schools on the subject of reading. The intervener has set up a support group for parents of the participating children, in order to bring to their attention the importance of reading, and to give them the tools with which to work with their children and with the school.

Positive results from the work of these programs reflect also on the other subjects revealed by the survey as in need of attention: reduction in the number of subjects, increased parental involvement, the growth of a sense of responsibility for learning among the pupils, parents, and teachers, reinforcement of community commitment towards the future of the school climate and its betterment.

One year after the start of the experiment, it is clear that there is, in the community, a desire to succeed, and a positive regard for the importance of gaining an education. The number of pupils who believe that they can succeed has substantially increased, the parents have begun to demand their rights from the education system, and some of the teachers have been brought to recognize and believe in the powers of the children to succeed.

2. An Example of Rebuilding

A. A model of the planning of the organization of the school according to "Education Clusters". Following the application of the principle of "equivalency" (a combination of a pilot scheme and a "holistic project") together with the start of the holistic project, the community decided to prepare a pilot scheme for the education system. The establishment of communication lines between the programs acted as a lever for considerable educational renewal by an overall reorganization quite different from that previously in place.

The basis for reorganization is the concept of "Choice in Education," in the spirit of the Inbar Report. The principle embodied in the report is that offering a choice depends on the ability really to guarantee a genuine choice. Genuine choice depends on the conditions pertaining in the area in which it must be applied, on the equivalency of the chosen components, and on the actual ability to make a choice.

The planning of the reorganization was based on exploiting the fact that the student population is characterized by a lack of socio-economic polarization, that the settlement has a large number of children, and that the schools are relatively closely sited. The whole town was declared to be one educational area, organized into "Educational and Cultural Clusters." It was possible to create eight such clusters in the town. Each cluster contains a number of kindergartens (about nine), about three elementary schools, and one comprehensive high school with both a junior high and an upper high division.

The clusters make possible the choice between educational institutions of equal worth (in physical plant, social, and educational content terms), each of which emphasizes a different pedagogical approach. That is to say, the equivalency of the clusters can be measured according to components that can be quantitatively assessed, such as physical plant and staffing, as well as by offering equal opportunities to all interested parties participating in the town's education system, to make use of whatever methods are best suited to them, the contents or pedagogical programs they prefer. The pupils and parents can choose the cluster that seems best suited to their needs and desires, with no regard to their home address. One school will be responsible for every child in every cluster, at any given time, regarding educational and social aspects, even if some of the child's studies are carried out in a framework outside the actual confines of the institution, whether in the same cluster, or in another. Heads and teachers will also be reassigned according to their choice in this way, their opportunity to specialize according to their talents and aspirations will be ensured.

The cluster is the main agent fueling the drive to achieve the educational goals, and within it, its own special educational format is created. Within the cluster, methodological and didactic content will be developed according to the chosen educational approach, and will be regulated and adjusted during the progress of the years of schooling from kindergarten to the end of secondary education. Thus, the cluster acts, at one and the same time, to fulfill an educational world view, to produce a wide range of contents and teaching methods appropriate to it, and also in managing and developing the logistic complex for all the institutions within its framework. The cluster is also the liaison body with all external bodies relevant to the operations of the education system.

The approaches for each cluster so far proposed by head teachers include: approaches derived from a preferred central value (such as: a cluster based on choice and dialogue in societal and educational areas; a cluster based on technological culture as a relevant foundation for the graduate; a cluster organized around the principle of itself supplying a service, and adopting a way of life and action appropriate to a philosophy of service; a cluster centering on the pupils as a clients, with the aim of identifying and nurturing their particular talents, and so on), approaches focusing on a certain area of content (such as: sport, languages, science, etc.), approaches centering on methodology (such as: a cluster based on planning for individual learning).

The organization of the system along these lines is likely to speed up the changes in the town's education system, changes that will contribute to directing the development of the system according to a general and all-embracing program over various time spans.

B. *A* model of one steering committee in a settlement to cover all the educational programs in that settlement, for the purpose of planning in concert the needs and goals of education, and in order to apply them by means of pooling resources.

Introduction: The settlement is small, isolated, far away from the center of the country, and close to the hostile border with a neighboring state. It has no secondary school, and the children are bussed to various schools in the vicinity. The youth lacked a guiding framework for their activities, and demobilized soldiers could find no sources to stimulate them to return to live in the settlement. The survey of needs revealed that there is a wide gap between the external and self-image of the settlement and its actual functioning.

In the holistic project, it was decided to try to achieve a "jump up the ladder" in improving the settlement's self-image, by rapidly instituting a intervention program with the age group 15 - 25. The method of action was characterized by a direct personal approach to the target population. First, a unit was set up in the local education authority in cooperation with the community center and under the close supervision of the intervention coordinator with the job of identifying and collecting information on all of the settlement youth, their achievements, and educational and social problems. The unit maintains contact with each one of the young people and the institutions in which they are being educated, in order to build up a system of personal and group assistance, a support framework for anyone interested. The action program was formulated in conjunction with the pupil, parents, educational institution, and people from the secondary schooling unit. The activities are carried out in a special enrichment center set up in the community center. Most of the instructors are students who express openness and desire for local and personal change and who are similar in their background to the youth of the settlement, and are thus able to act as exemplars of the fact that "you, too, can succeed." The model for instruction is based on personal connection between the instructor and pupil, and on the instructor's personal involvement with his or her charges. The instructors are trained by professionals who help them to tackle their didactic and pedagogical problems. An expert in the development of thinking has worked with the pupils in order to diagnose characteristic failures in their thinking processes, and to root out the problem. In addition, a system of permanent meetings was set up with the schools, as well as a structured format for evaluation and follow-up of the progress of each individual pupil, in terms of the goals determined for them in light of their achievements. The parents and the community receive regular reports on the achievements of the education system, with the purpose of encouraging them and promoting their involvement. In parallel to these activities, a workshop for leaders was instituted to develop local educational leadership, in order to build up lines of communication between all those involved in education. A steering committee was also set up, the activities of which are continuous and involve such aspects as the pooling of resources.

To achieve the desired results, it was necessary, among other things, to enlist the support of the settlement in a new concept—dealing properly with secondary pupils requires financing something that up till then had not been included in the budget planning. This need led to a rebuilding of the process of budget planning and operation of the educational work in the settlement.

An investigation was held of the various sources of finance, and weak points were identified: it was found that each separate source of financing had its own steering committee; there was an imbalance in the educational programs in respect of the distribution of the target population; the choice of programs was often haphazard, or based on vested interests; an overview was lacking *vis-ŕ-vis* such choice; and the agents approving the operation of the programs were regional or departmental representatives who lacked the overall picture of the needs of the settlement.

Discovery of the fact that the deficiencies in the decision making and planning processes were giving rise to a waste of resources, forced those involved to integrate the various committees and pool resources (hours, money, days of instruction, etc.). To that end, a process was started within which, all the existing education programs were mapped and presented to all the various steering groups. The mapping was displayed in a table indicating the areas of action versus the target population and the budget received from each of the sources. Also, tours of the educational institutions were arranged in order to view and learn about the programs, and a settlement steering group was set up with members representing all the committees and groups. This team was intended to form a single think-tank for the entire education system in the settlement.

Thus, following a process by no means easy to carry out, but very important, the ability to achieve a systematic overview of the needs of the education system, to make coordinated plans, and carry them out, was created. The decision to begin pooling the financial and personnel resources contained within the system, in order to make utilize them more efficiently, and was therefore the outcome of the choice of a holistic approach to education in the settlement. The decision to pool resources demands the tightening of lines of communication between the active agents, and may even lead to a readiness to redistribute the available forces, that is, to "Rebuild."

PREPARING TEACHERS FOR SCHOOL REFORM

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This text treats about the first steps in the study of dramatics constructed and lived in the school space. Thus, being the first steps, it is, my beginning straight into the subject, in it there intervene, besides the effort of writing it, multiple and profound inquietudes, doubts, fears, pleasures and passions, peculiar to somebody who is learning.

Creative intensities, field of intensities

Dramatics is a field of intensities, creative intensities, because it implies a whole net of symbolic contracts and norms, where there are at stake our loves, hates, passions and affections An instance of reference, of existential self-positioning, here the fundamentals are always the construction of existence. Evidently, many times, it appears perpassed by a double capture: a capture carried out by somebody else (this other one can be the school culture) and by a desired capture, for there are always nets, webs and plays of power, but this is not the issue at this time. For now, it is convenient to perceive that, here, there are involved desires and knowledges. Desires and knowledges of somebody who teaches and somebody who learns, assuring a movement, and incarnation of needs and demands, giving the idea of a heterogenesis, of poetics. Therefore, it is not possible to construct universals for the treatment of these dramatics. Heterogenesis, osmosis, singularity, nothing of this is given' but they exist in the virtual space, needing to be incarnated/ actualized, implying, for the student, a will to produce his own subjectivity. Rogerio da Costa speaks of the construction of one's own existence, in its eternal invention.

Post-piagetian constructivism, under the viewpoint of dramatics, presupposes the possibility of a self-organization, a constructivism of existence in the line of positivation The problem consists in the teacher's intervention in the construction of the social and cultural learnings in order that. the virtual autonomy of the student, as well as his own, actualize themselves in the engagement of liberty, because, as long as it is not engaged, it. Is nothing, or rather, it is only a value of reference, a value that :is there as a virtual figure, as a possibility. Pedagogy conceived this way, in the construction of the dramatic life/ of subjectivity is a comprehensive pedagogy. In this sense, we can speak of the involvement of the school' for a sensible reason[1].

The school dramatics and the construction of subjectivity

Dramatics may not by neglected in favor of logic, because, if, on the one side, logic takes care of the construction of an objective order, of a scientific knowledge, through concepts, on the other side, the levels of this conceptualization and of the resignifications which the student has to carry out with the acquisition of this new knowledge are influenced by dramatics, by the subjectivity lived in the school space. It is necessary to keep in mind that logic and dramatics interconnect in the construction of knowledge and, that the re-cognition favors the incarnation of the concept not as something crystallized, a skeleton of the world, but as a multiplicity, for, as refer Deleuze and Guattari,[2] "a concept tells the event, not the essence or the thing (. ...) it is a mere event of somebody else". In the saying of these authors, "the concept is defined by the inseparability of a finite number of heterogeneous components passed through by a point in an absolute overflying, at infinite speed". The concept is like a heterogenesis, being, therefore, an act of thought, at the same time absolute and relative, but always moving. According to Nietzsche,[3] concepts are signs of recognition.

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[*] Professor at the Masters Program in Education. UNISINOS

[1] This term is influenced by the referential of M. Maffesoli.

Transferring these considerations into our school universe, it is possible to verify how much we ourselves and our students speak of single duties through abstract generalities, turning language into an act of forgetting of those many singularities that compose the world. What we want to say is that logic works with the will of truth. For there is noo happening in itself whereas dramatics, the lived subjectivity carries, in its bulge the affirmation or negation of sense of what happens is a complex whole of phenomena, chosen and assembled by an interpreting being"[4]. Therefore, it is the dramatic, symbolic interpretation that illuminates the logical content, or else, the dramatics that guarantee the logical learning. In this sense, post-piagetian constructivism point clearly to a language of affect. S. Paim [5] says that "the language is constituted in order to attend our dramatic life rather than our logical life". In fact, logical. learning as well as dramatic learning is the learning of what.. the signs, the symbols, the socio-cultural codes tell us about. their language. The deciphering of this language implies lines of learning, lines of sensibility to the sign, to the symbol, present in school. Nevertheless, it is convenient not to forget that the unity and plurality of the world consist precisely in that these sociocultural. signs, symbols and codes appear in various ways, which are not of the same kind, nor are they interpreted in the same way. But, for all people in the world, this knowledge is fundamental. G. Deleuze [6] says that somebody only becomes a cabinet-maker, by becoming sensible to the signs of wood. What he says is valid for the socio-cultural learnings. It is through these learnings that the student learns to administer his daily life and to transit in different times and spaces, designing himself. Obviously this is a process that involves a good deal of courage and uneasiness, for, there is no learning without courage - without deterritorializing, as well as there is no learning without uneasiness due to the place of not-knowing, a place which exposes to the other. Therefore, there is no learning nor knowledge without alterity (otherness). In this sense, alterity is a fountain and strength of life.

Esthetics as an expression of the world

The student expresses the world from a certain point of view. However, this signifies the expression of his own difference marked in the encounter with an alterity. This world, expressed by the student exists only in his interior, in his dramaticity, as a pleat, something from-without which interiorizes itself, being expressed, such as an essence, last and abolute difference, [7]- an essence that wraps itself up and poetizes the student constructing his subjectivity. In this sense, to learn and to teach dramatics in the school space means to compart an esthetic, it is, a sensing, an experimenting in common. To M. Maffesoli,[8] , esthetics seems to be the best way of mominating consensus s elaborated in our times, the one of the comparted sentiments or, as also says the same author, of the exacerbated sensations. What is proved, created in common is primordial and inaugurates the re-cognition of a " harmony of contraries, constructing ethics - ethics of esthetics in the school space. The limit of esthetics lays precisely in the apt etude for creation.

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[2] Deleuze, G, and Guattari, F. "Qu'est-ce que la philosophie?" Paris, Gallimard, V. XII, p. 32.

[3] Nietzsche, F., "Oeuvres philosophiques completes", Paris, Gallimard, 1978, v. XII, p. 32.

[4] Idem, p. 47.

[5] Paim, op. Cit., 115.

[6] Deleuze, G. "Proust e os signos", Rio de Janeiro, Forense, 1987, p. 22.

F. Guattari[9] says that "in all fields we would find the same interlacement of three tendencies: an ontological heterogeneization of universes of reference configurated through a thing I called the movement of infinite; a machinique abstract transversally which articulates the infinity of finite interfaces manifested by such universes in the same hypertext or plan of consistency; a multiplication and a particularization of focuses of antipoietic consistencies (existential territories). Transferring this question into the school if we see that esthetics is, consequently, an act of responsibility in relation to the options which keep configurating themselves in the school space and that this way it tends to suppurate the pre-established schemes In this sense, ethical choice originates from a processual movement of creation, notes any more from divine or formal laws. Being a creation of existence, esthetics in the school space, has a constructivest character and strength possibilitating the subject to be defined such he really is' or else, a movement. Dramatics lived in school is nothing but these ethics and these esthetics, influencing/the quality of an original world where each subject student and his style dwells, establishing, because it is esthetic, a field of possibilities of comprehension of the other, of alterity. This signifies a movement of acceptation of the stranger-in-us' as expresses. Polink accondition for differentiation and becoming.

The study of dramatics

Here is why the study of dramatics, not as a simple reconstruction of the conducts and practices in school and of the representations of these behaviors, but as a study of dramatics as an experience -- an experience between cultures, fields of knowledges, normativities, regulations and ways of subjectivity. This implies our anchorage in schemes of thought that situate the student as an agent of desire, implying, consequently, a dislocation of the normatizing axis which founds the school culture and the teaching of a new look in reference to the formation of the daily and scientific knowledges, to the systems of power which regulate dramatics and to the forms under which the students can and ought (have to) recognize themselves as subjects of what is lived in school. In truth, this process of problematization puts us in face of a first verification *p* which really is not new: that there exists a genesis of dramatics lived in the school space which is ritualized in the passage from the familiar world and its daily knowledges to the school world, its culture and its scientific knowledges - where the neophyte leaves one territory

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[7] For G. Deleuze, essence is the ultimate and absolute difference that constitutes being, which makes us conceive it. This diffrence, for Proust, "without art, it would be the eternal secret of each one of us". In: Proust e os signos, op. Cit.

[8] Maffesoli, M., "Au creux des apparences. Pour une ethique de l'esthetique, Paris, Plon, 1990, p.15.

[9] Guattari, F., "Gaosmose", Rio de Janeiro, Ed. Ed. 34, 1992, p. 136.

:in search of new territorializations. This new territory, field of socialities, introduces the students :into a series of micropolitical problems: on the one side, an incodification on which reposes the complex of the social and cultural armour of his environment and, on the other hand, the school culture. This movement of socio-cultural similitudes and differences, this field of initiation into the system of representation and values of the school culture, passes, in a conventional school, through dispositives which mould the children and a dolescents to the perceptive codes, the codes of language, to certain ways of intersubjective relationships, to an authoritarian authority and to vertical hierarchy, finally he passes through a technology structured. in the dominant social relationships, in its models/ In its codes. Although these first verifications are not new, they are the beginning of the theoretical dislocation for the interrogations about what we actually try to do, it is, to study how the construction of the student inside the school is being processed, of these esthetics lived by him. Through what mechanisms (game of truth) the student thinks about himself or how does he perceive himself as somebody at the margin, as a subject out of *Place?* When he looks at him selfi as livining being as somebody who belongs to humanity, as somebody who territorializes times and spaces, as a talking being? When he judges and punishes himself? How in school moral and ethics are constructed and what has this to do with the construction of the subjectivity of the student:? With his desire? It seems to me that there are many interrogations, many ways, many risks, reservations, inquitudes and curiosities - anyway, this labyrinth of emotions and truths takes us to the marvelling that the thread of the questions makes appear

Thought' body and future

To search for answers to these interrogations implies the observation of the daily notion of the behaviors in the space of the school, because dramatics rely on changes through which the students have to give sense and value to their conduct, their duties, sentiments, sensations, dreams and pleasures - as an experience modifying themselves in the game of truth. We could say that in the conventional school there is no process of critical construction of this experience; what exists is the establishment of disciplining and modelizing practices, of prescriptive practices, nevertheless, in the practices that function founded upon the paradigms that comfort the post-piagetian constructivist proposal, necessarily, these dramatic questions will have to be looked at as a critical process, because it is not a simple question of simplifying appropriation, but an exercise in itself. Or rather, through these games of truth, games that construct what is of the order of true and false, the student will remake, affirm, problematize his own conduct, as an ethical being. What in fact I want to stress is that, at the last end, dramatics in school has a more ethical than moral processual character, having to consider the desire, the student-movement of subjectivations (not the student constituted as a simple subject, because he is a movement of subjectivations, but the student as a potentiality of an artistical-wishing) and that of enabling the general form of interdiction to effectuate the permanent creation of the world, the world as a work of art, evidencing a compromise with the strength to accomplish life in the differentiation of life.

PROGRAMMES AND PRACTICES RELATED TO: INNOVATIONS IN PRE-SERVICE AND IN-SERVICE TEACHER EDUCATION AND THEIR LIKELY IMPACT ON SCHOOLS; THE ROLE OF COMMITMENT EMPOWERMENT AND REFLECTION; THE ROLE OF ASSESSMENT AND STUDENT SUPPORT

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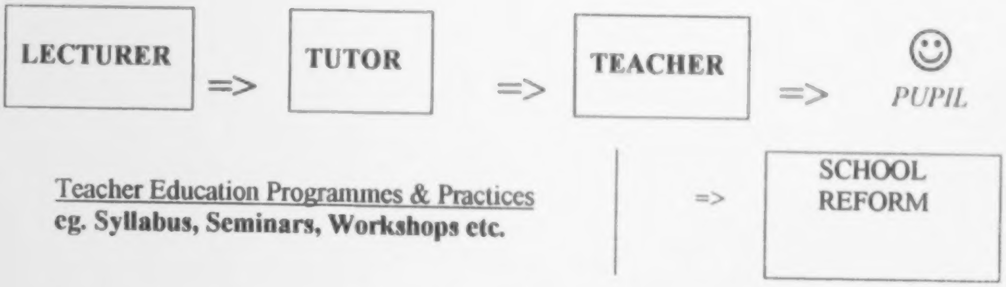
It is important to note and to show that in the world all over, Teacher Education (TE) is the parent of all types of education. This is due to the fact that teachers of any category, whether Kindergarten, Primary, Secondary or University should originate from TE, So credit should be given to all those who labour hard to initiate innovations in both pre-service and in-service TE.

In the 43rd World Assembly and onwards I beg that when addressing Teacher Education Programmes and Practices (TEPP) we give equal attention to Teachers' Colleges (where teachers are prepared) and institutes/universities where (teacher-trainers are prepared) as well, This is because in a similar way a pupil is taught by a teacher who was once trained by a tutor, the latter was also trained by a lecturer. So if there is any appreciation or correction to be made in the TEPP the teacher, tutor and lecturer should be involved in one way or another.

Innovations in TEPP, therefore, should be looked at in totality (teacher, tutor and lecturer) if school reforms are to be tangible. The following diagram may help us visualise the point.


LECTURER
=>
TUTOR
=>
TEACHER
=>
PUPIL
Teacher Education Programmes & Practices
eg. Syllabus, Seminars, Workshops etc.
=>
SCHOOL REFORM

From the diagram above it follows that when handling TEPP either in pre service or in service (distance education, seminars, workshops) at either college or institute level, our prime consideration s the pupils under school reform.

Teacher Education Programmes and Practices, however, have been criticised for producing technician teachers rather than professional teachers. It has been observed that "new courses are designed to make teachers appropriate for local conditions, more relevant for rural children, or more vocationally - politically oriented".[1] In particular, "new syllabuses, textbooks, equipments, learning materials and teaching methods"[2], have been put in place. But a "balance between theory and practice or between college and schools" [3] has not yet been given enough attention.

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[1] Sheldon Shaeffer
[2] Sheldon Shaeffer

On little guidance given to teachers, Sheldon Shaeffer, observes that "Current training systems often try to reduce training to standardised teacher-proof activities and a discrete and common list of teaching skills. In the crusdest terms, she says the training of teachers is designed to produce Technicians" rather than 'professionals". One reason for this situation is the inability of the teacher training systems of the developing world (and much of the developed world as well) to respond to the difficult task of training teachers to handle an increasingly complex process in an increasingly complex context." [4]According to Shaeffer, teachers are not guided to face the variety of pressures (economic, academic, pedagogical, structural, social, political) that confront them both inside and outside the school.

However, since teachers are still the rock on which education reforms are built, anything possible should be done In any country to give proper guidance to teachers by which they will become agents but not objects of reform. Attention, therefore, should be given to other' aspects on top of the new syllabuses, textbooks, equipments and learning materials.

In the October, 1996 Geneva Conference, it was observed that the purpose of Teacher Education Programmes should be to develop in each student his general education and personal culture, his ability to teach and educate others, an awareness of the principles which underlie good human relations within cross national boundaries and a sense of responsibility to contribute both by teaching and by example to social, cultural and economic progress[5].

A close look at this purpose brings out the term "personal culture" nearer to us; which appears to be the basis for general education, ability to teach, good human relations and a sense of responsibility. It needs therefore to be examined further.

Personal culture, once in a student can lead him /her to become self directed, self-supervised, set self-disciplined and a confident teacher. Such qualities are essential for any education reform.

Shaeffer further suggests that under participatory teacher training where the students play an active role in the training process like, the skills and knowledge to be given, training becomes self directed and teacher-taught. Using the same approach I asked final students to list down the items they think are less taught in the college and yet found very vital in their practice-teaching. Ninety percent of the items they listed were social, cultural and economic oriented, leaving only ten percent for the academic-oriented items. Such and similar observations reveal to us that student's ideas can enrich TEPP for tangible school reforms.

Practical Experience

Side by side with Shaeffer on participatory approaches to Teacher Education I would like to emphasize the need for practical experience in TEPP for the improvement of teacher education and all forms of education related to national development. Within this line therefore we have to integrate college and community economic activities through developing strategies for promoting self-and-local reliance; and if this is done we shall have made **permanent** impact **on** the minds of our student teachers who will eventually participate actively in school reform.

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[3] Sheldon Shaeffer

[4] Sheldon Shaffer

[5] Oct. 1996 Geneva Conference

To be more particular I would like to say that programmes like "Vocation Oriented Teacher Education (VOTE)' should be emphasized. Under VOTE, our student teachers could be exposed to aspects like cookery, carpentry, weaving, tailoring, dying, handicrafts and computer literacy Many of these programmes are practiced in school;but not properly done because the teachers we produced are not trained for them. Eventually untrained teachers but found with such skills are employed instead.

In order to ensure practical experience and to ensure intergration between college and community, students and staff could be made to visit industries commercial areas and agricultural places. If such practices are part of the curriculum where students write reports thereafter, then permanent infact will be built on the students minds.

Presently, sorry to say, not many colleges are facilitated with VOTE equipments - more so in developing countries including my country, Uganda. What comes out of those countries are teachers who are very skilled in chalkboard teaching but less or not skilled in the life skills needed by the communities they teach in.

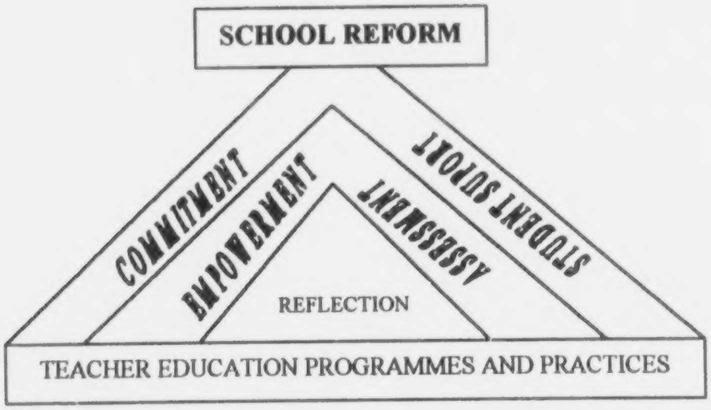
Improving the quality preparation of teachers of today, therefore, necessitates the introduction of or intensifying VOTE programmes. For it is hoped that through such programmes there will be set the best plan and the best process to achieve educational excellence and national prosperity.

Community based approach

Community Based Teacher Education Programmes (COBATEP) if used, are likely to involve the parents political and religious leaders whom in the end can mobilise the whole community to support school reform.

Nevertheless I strongly believe that Particifatory Teacher (PTT) or any other innovations can not be effective without committed staff, This is because in order for the training to become self directed and self taught, alot of of commitment is needed from the staff say in planning and monitoring. Secondly, is that the social and economic status of the trainers which determine the substance of a Principal or tutor, is also vital . Thirdly, the personal culture of the trainer will greatly determine the personal culture of the student and hence teachers. Another hidden aspect that can affect TE innovations is the way student- teachers are examined and later termed as successful or failures; whether it is academically sided only or all round, Lastly is the aspect that is always given minimum attention and yet count alot - the students' "keep going" in the innovations, that is how much they are involved in the innovations.

The above or a similar argument surfaces five aspects which I would like to call the pillars of school reform which are built on TE innovations. These pillars are Commitment (C), Empowerment (E), Reflection (R), Assessment (A) and Student Support (S) - CERAS The following diagram may help us figure out the argument.



A glance look at the diagram informs us that reflection is the most central pillar. We should keep that in our minds as we study further.

The Role Of Commitment In The Impact Of Tepp On School Reform

Commitment means a strong belief and active involvement in the prescribed way of doing things. So if one is not actively involved or if one is involved but in a destructive way then one is not committed. It involves the 3C's (Concern, Care and Consultation)' Commitment also involves Time sensitivity (T), Responsibility (R), Enthusiasm (E) and Devotion (D) - TRED. On the other hand however, commitment can also involve the 3 T's (Toil, Tolerance and Team spirit),

A study of commitment brings in "seriousness" because no one can be committed without being serious. Once a strong belief about correctness develops into someone, then seriousness is intensified. Seriousness has two views; serious interest and serious attention, Serious interest is what we refer to as concern while serious attention is what we call care.

Concern

Concern (serious interest) persuades someone to dig deep and wide into an affair, In other words, concern adds more weight on someone's mind in relation to the task beforehand,Similarly, concern persuades a teacher trainer, student-trainee or teacher to know more about other people or programmes. In case of innovations, for instance, concern persuades staff and learners to willingly accept the new methods or programmes. In particular, where lecturers/tutors have serious interest in the students themselves or teaching, Innovations are not looked at as a bother. Staff and students In otherwards, feel and show that they belong to the innovations. They have a high degree of curiosity by which they are always eager to learn all the details of a school reform. On the other hand, however, the tendency of learning to learn develops day by day. Therefore, commitment and in particular concern, inculcates the sense of curiosity and belonging which cement the bond between programmes and practices and the people involved (staff and learners) This is why KiggunduMukasa (1995) asserts that a teacher who does work with CONCERN is Identified with the following, talks in terms of my/our business (school or children) rather than your or his school, avoids things which are likely to spoil the school; contributes positively for the development of the organization; encourages everybody to work harder; and is always appreciative of whatever improvement there is in the organisation.[6].

Care

Care (serious attention) is the steady application of the mind period In othorwards care is the total involvement of all the concerned senses in performing a task. A caring teacher-trainer, similarly pays serious attention to the academic and social developments of the students whether in or outside the classroom. For instance preparation for teaching, the teaching itself, correcting books and performing weekly duties are all done with care. identified and corrected. In this way students' weaknesses can easily be identified and corrected.

Such a watchful atmosphere shapes the teachers- to be accordingly so that even when they leave the college to start work they serve with care. Similarly where teachers work without care, there is a care-free atmosphere whereby no one bothers whether facilities are properly kept or not. Whether students are taught or not, or whether students behave well or not, With commitment, therefore, staff and learners are all observant, about the affairs of their institution which will eventually result into little or no wastage of resources (time, information, money, land, furniture, learning materials, personnel etc.). Due to lack of enough care in most schools, many school reforms have not met the required standards.

Consultation

Consultation (looking for advice) is another aspect which builds commitment on somebody's life. Without consultation, there is a tendency of a one man's decision; the thing that spoils many Innovations. However, intelligent and energetic a staff will be, consultation is a must. When consultations are constantly made from the people concerned, like the superiors, colleagues, subordinates, the natives and experts, problems in school reforms can easily be solved. But where such consultations lack, the way will always be too tough to allow recommendable progress.

Time sensitivity

Planning ahead of time and performing duty on schedule saves a lot of time, energy and money for future e undertakings. Such time-sensitivity, if observed in colleges can lay a firm ground for the future teachers to be time disciplined On the other hand, in institutions where lecturers/tutors are not time sensitive, they report late for teaching, begin teaching late, do not finish the required text and eventually leave programmes incomplete. When programmes are started and left incomplete due to lack of commitment (time, sensitivity in their case) there they will be no meaning in starting such programme for school reform.

Responsibility

Commitment also accelerates responsibility. Responsibility is the urge that pushes somebody underneath an obligation to finish a task at hand in a satisfactory way. In institutions where staff feel and show that they have a very responsible job to particularly train teachers/tutors, then dependable teachers/tutors are produced as a result. It follows, therefore, that if staff are responsible enough (do the right thing at the right time, in the right way, before the right people) then innovations will not be taken as a bother but as a part of their duty.

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[6] kiggundu-Mukasa. Success in School Practice Crane Pub. 1995

Commitment instils enthusiasm in a person. An enthusiastic lecturer/tutor shows a strong and warm feeling about the programmes and the students. In other words, he/she does the work with a lot of vigour or zeal Where there is no zeal, no innovations can succeed despite the availability and abundancy of resources and good planning. We should remember that human resources matter more than any other resource Hence a need for enthusiastic staff to make enthusiastic students who will turn into committed teachers needed for school reform.

Commitment Devotion creates devotion in staff and students as well. Devotion (strong attachment to a task) carries someone through a series of activities of the task up to its completion despite the hardships therein. Any work done with devotion rarely fails. Such a spirit (culture) is of much importance in the production of teachers and carrying out school reforms. I strongly believe that the devotion of a college will, to a great extent be the devotion of the teachers it produces.

Toil
Tolerance
Teamwork

Personality Environment Commitment enables somebody to toil (struggle hard), to tolerate (endure unfavourable conditions without showing serious effects) and to teamwork (join hands with others). Hard struggle, endurance and working with others by which toilful, tolerant and teamworking teachers will be produced for any school reform. There is need to realise that commitment among staff is not automatic; it maybe created and spoilt. Following are some factors of commitment suggested by Michael Armstrong (1988).

Personality

Personality of staff and students can affect their commitment . The intelligence and emotions of an individual teacher for instance can greatly affect commitment. Some teachers have sticky reasoning where quick decisions can be a big problem, while others have no problem to switch off from one issue to the other. Some staff are touchy where even a slight Joke can make him lose his temper whereas to others the more jokes there are the better for them. Some teachers with built in-drive for making things happen will be fully committed; all they need is putting them in the right direction and giving them sufficient scope. But those with no-in-built drive perform under close supervision for making things happen half full; no matter how much they are motivated.

Environment

On the environment basis, the school or college culture and values may either encourage or discourage teachers. In a school where the culture is geared towards humane, courtesy, property care or handwork skills, hardly any related innovations will fail - because staff commitment will be enhanced by the institution setting. But where such a culture is lacking there will be alot of pull and push and maybe the breakdown of the innovation process.

The Role of Reflection In The Impact Of Tepp On School Reform

Reflection could be looked at from two sides, the "showing" and the "thinking". On the "showing" side, reflection means giving back the image of something or expressing a sign of something. Good reflection likewise, means giving a similar good reputation,. But bad reflection means giving similar bad reputation.

In order for TE innovations to have some impact on schools there is a need For qualitative TEPP which are built on the appropriate Behaviours (B), Ability (A), Skills (S), Knowledge (K), Attitudes (A) and Values (v) -BASKAV appropriate in a way that these BASKAV will be the ones to be applied in the school reform when students qualify.

The behaviour we want to see or hear of in schools must be catered for among the student-teachers, teachers and teacher trainers (tutor and lecturer). For instance if we want shabby, quarrelsome, or drunkard pupils in schools then we encourage arrogancy in colleges or institutions, But if we want smart, co-operative, hardworking and well behaved pupils in school then effort must be made to observe dignity and integrity among trainees and trainers.

Similarly, the abilities we wish to see or hear of in school cannot come out of the blue; they should have been catered for sometime back within the teachers through their trainers.

To be more particular, there are four aspects of reflection in relation to TEPP and school reform. These are principal's general picture on the staff; principal's impact on students, staff impact on students; teacher's impact on school reform.

Principal's general picture

The Principal's general picture has a great impact on the staff, students and parents; hence will have a permanent impact on the schools where the teachers-to be will teach by then, A caring Principal will create a caring atmosphere in the college. Similarly a parental Principal will create parenthood in the college. A professional Principal who spends much of his time in academia will inspire everybody to expand his knowledge through further reading. In most cases, ill mannered people will always shy away where there is a disciplined Principal. But a shabby, disorganized, or ill-mannered Principal will create a bad picture before others. Hence the Principal's discipline being a catalyst in school reform

Principal's impact On staff

A Principal should always remind his staff; that "we like people who are helpful, kind, thoughtful and considerate; who speak well of others when they are not present; who are not self-centered; who share our interests with us; who keep appointments; who are smart, faithful and hardworking.[9] Such reminders will form part of a rich culture in the college.that rich culture will turn tutors into desirable persons worth the name.

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[9] Pschology for living

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Teachers status

Status of the teachers can also greatly affect their commitment, This is why it was also observed in Geneva October, 1996 that "working conditions for teachers should ,,, promote effective learning and enable teachers to concentrate on their professional tasks," It follows, therefore, that when working conditions for teachers are unfavourable, commitment will be negatively affected because teachers will always be jumpy. On the same issue Semakula Peter (October 1996) said "Alot has been talked about commitment but still there is a tendency of looking for jobs other than careers." It is needless to say, that there is need for performance improvement in schools and colleges through paying great attention to the status of teachers and tutors inclusive.

THE ROLE OF EMPOWERMENT IN THE IMPACT OF TEPP ON SCHOOL REFORM

Empowerment is the giving of power or authority to someone to do something, Entrusting followers with some authority to perform a duty can inspire them and increase productivity. For instance, when a tutor has been entrusted with the academic improvement or discipline a lot more can be achieved than when everything is done by the Principal. Empowerment can as well mean autonomy; and it rests on the relationship of trust between the superior and subordinated[7].

Empowerment to be more particular, involves delegation of powers, Delegation, as Benett (1994) observes, is the assigning by a manager to subordinates of authority to undertake certain tasks, while retaining ultimate responsibility for their satisfactory completion[8]. It should be noted that delegating resources like information, facilities or finance are also considered, Secondly the leader needs to realise that it is still his responsibility to see work complete.

Innovations in Teachers Colleges can not succeed unless Principals are empowered, Giving authority to Principals to carry out innovations in the pre-service and in -service can be either in legal of financial forms.

It should be noted that however much legal authority one has without financial authority, little or nothing can be done in trying to innovate Teacher Education. So empowering leaders in Teacher Education be In both legal and financial forms. A Principal without financial empowerment is not a Principal.

Empowerment has a higher multiplier effect on staff involvement in innovations. The more involved the staff are in college programmes the more they feel part of the college. So when designing, implementing, evaluating or re-designing programmes and practices staff members should be assigned tasks at any one stage. When such a system is set in a college, Staff will not find Innovations a threat but a pleasant task. The same atmosphere can be carried into schools where the qualifying teachers will serve. When students stay in the college seeing tutors carrying out certain duties on behalf of the Principal, it will not be very difficult for them to do the same when they qualify.

It should be noted that when colleges and schools are not empowered through proper funding, education (like seminars, or workshops) and status maintenance any innovations in TEPP and school reform will always flop.

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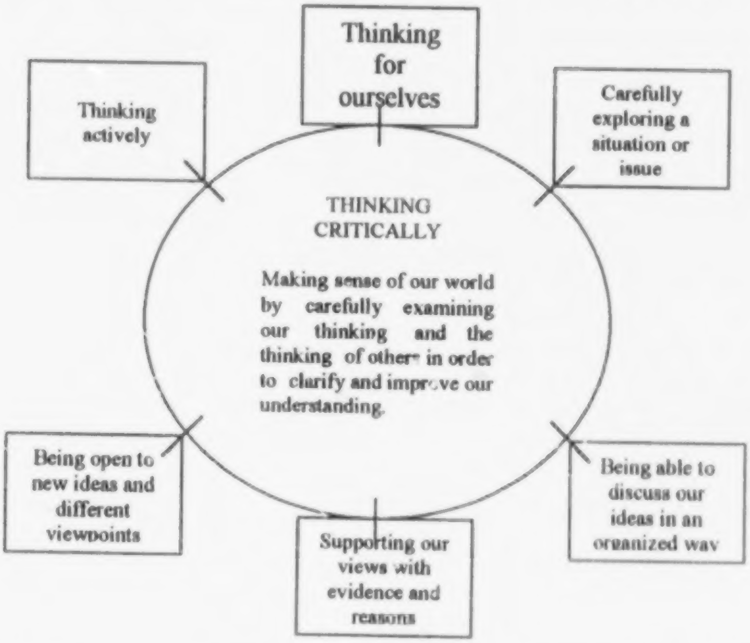
[7] Stoner and Freeman, Management , 1995

[8] Bennett. Management . Long. UK, 1995

make the best use of any resources available. Being able to discuss ideas in an organised manner is an ability by which college or school staff can evaluate and report ably. On the other hand, however, if the staff is not open to new ideas he/she will be rigid - which is an enemy of school reform.

Therefore, basing on the Showing" and the "thinkings views shown above. It is evident that reflection is a prime factor in teacher preparation for school reform.


Thinking for ourselves
Thinking actively
Carefully exploring a situation or issue
THINKING CRITICALLY
Making sense of our world by carefully examining our thinking and the thinking of others in order to clarify and improve our understanding.
Being open to new ideas and different viewpoints
Being able to discuss our ideas in an organized way
Supporting our views with evidence and reasons

The Role Of Assessment In The Impact Of Tepp On School Reform,

Assessment, in this case, is the process of judging the quality of Teacher Preparation needed for school reform. Quality Judgment that can enhance school reform should consider an all-round-assessment; this looks at the impact of programmes and practices in the academic and social perspectives of a learner.

Criterion-referenced assessment

In the academic perspectives, as we may recall, we can use criterion - referenced tests which are designed to check whether or not the learners have met the basic objectives of a learning segment. They are not designed to sort out the best from the average or the less than average but to determine whether or not individuals have met the standard that is why they are sometimes mastery tests. This part of the continuos assessment since it monitors the learners progress segment by segment. Here the learner competes with the test but not with another learner.[13] I wish this was the major assessment system in Teacher Preparation.

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[13] Chaffee J. Critical Thinking

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Principal's impact on students

I strongly believe that a leader makes a Society. Similarly, , Principal makes student teachers and hence makes teachers for school reform. To a certain extent, the Principals BASKAV will be the BAS KAV of the teachers produced under his care. So the Principal should always treat him/herself before students bearing in mind that one day they (students) will be teachers of his kind. Since the illmanners or good manners of the Principal have unmeasurable impact on the students led, then the Principal - student relationship is of great value towards school reform.

Staff Impact on Students

It is pointless to say that a well molded staff will form well molded students. It follows therefore, that in most cases, well-dressed and loving staff will inspire similar qualities in students; peace loving and patient staff will indirectly inject the same into their students; and controlled staff will guide students to turn into cool headed teachers who can tactifully handle school reforms. So there is a great need for staff with worthwhile habits like working, eating, dressing, talking, sleeping and stress coping habits among tutors.

Teacher's impact On school reform

School climate is greatly affected by the teachers because they are the implementers; this is why it is repeatedly said that teachers are the rock on which any school reform is built. It should be noted that "success of reform depends,in large measure on the features of the local school, the school culture and ethos.[10]"

However well trained the teachers will be, there is an earnest need for in-service in service short courses by which teachers will always be kept abreast with new changes in education. On behavioural part, in particular, teachers must be exemplary If any school reform is to succeed. On teacher's conduct "student's too, believe that the failure by teachers to fully understand and stick to their code of conduct has been one of the main factors leading to widespread indiscipline.[11]

Reflection can be looked at from the thinking view; where it refers to thinking deeply and carefully about the possibilities or opinions. To reflect is to think back on what we are thinking, doing or feeling. By careful thinking back on our thinking, we are able to figure out the way our thinking operates and so learn to do it more effectively[12]. Reflection here which means critical thinking could be analysed through the following diagram.

If reflection is looked at from the idea shown in the above diagram, it is obvious that school reforms cannot take off without it. Thinking actively is an important tool at any stage of school reform, from planning to the evaluation stage Criterion referenced assessment

Thinking for ourselves helps us to carefully examine the way we make sense of the world around us which is the ability needed by anybody in colleges and schools. Careful exploration of a situation or issue is the ability by which college or staff and learners can

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[10] Pschology for living

[11] Mugeere A. New Vision 19/10/96

[12] Mugeere A. New Vision 19/10/96

Norm referenced assessment

Norm- referenced tests are used to compare pupils with each other and determine each individual's standing. The learner in this case competes with other learners other than with the content. [14]This is the most common type in colleges and hence in schools. The danger with this method is that when a test set in a substandard way and a learner performs very well compared to others she will think that she is very good when in the actual sense she may not be, I wish norm reference assessment was used less often in colleges and schools.

A close look at norm referenced and referenced show that norm referenced tests better lend themselves to ordinary school marking systems, whereas criterion referenced tests are more useful for diagnosis, individual instruction and determining pupil competency.[15] This comparison probably helps us to partly explain why school reforms fail. Since norm-referenced testing can rarely yield pupil competency then school reforms will always be paralysed by the mostly used types of assessment On the other hand, however criterion -reference testing is an indispensable tool of school reform.

A visit to Kibaale Community School (the first long-term major project for Pacific Academy, Canada) educated me further on the assessment of students. They have their basis of Assessment and Evaluation which is that Each one should test his own actions, then he can take pride in himself, without comparing himself to somebody else...." (Galatians 6: 4). That is why they believe that since" ...each student is created by God as a unique individual, evaluation should encourage personal growth. They continue to believe that t" the emphasis in assessment and evaluation needs to be on progress and improvement rather than on competition and comparison among students." Therefore teachers keep accurate records of individual progress for each student."

Similarly, there is a need for us to formulate a basis upon which the assessment will built. Such a basis should imply among others; Improved Teacher Preparation (ITP), Cultured Teachers (CT) and learners competency (LC).

Performance Based assessment

On the other hand however, there is a great need to link the performance with assessment for educational quality. Writing about Performance Based Assessment, Linda Hammond (1994) advocates for bottom-up reform as against top-bottom; where assessment is used to give teachers practical information on student learning and to provide opportunities for school communities to engage in a recursive process of self -reflection, self-critique, self-correction and self renewal." So, as we plan to assess any school reform we need to priotise the school community involvement and this will always push us to look for practical information on students.

Stability of behaviour

It is incorrectly taken that whenever we talk about Assessment we observe and rank students according to the way they perform in class - and rarely pay great attention to behaviours. I strongly believe that in order to ensure quality preparation of teachers for

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[14] Callahan and Clark. Teaching in the middle and secondary school.

15 Callahan and Clark

continuos reform of educational institutions, stability of behaviour should rank first in Assessment. Stability of behaviour refers here to the correction of behaviour for children assessed at two or more separate time periods[16]. Empirical observations have shown that some youths these days, take life issues in anyway they want; and if not well guided, they can fail to make professionals. Some of the reasons for such tendencies are single Parent homes broken homes. part-time parenting (taking long without being seen at home), substitute parenting (much dependency on house maids), uneducational television programmed, and peer groups to mention but a few. Our task as trainers, therefore is to observe whether there are incidents like rampant sex offenses, theft, alcoholism, bullying or arrogancy among our student-teachers and then apply stability of behaviour.

The Role of Student Support In The Impact Of Tepp On School Reform,

Student support a programme can play a big percentage towards its Success. Such a such cannot be achieved where there Is no student involvement in the college programmes and practices. Experience has shown that there are four main factors which contribute to student support namely; the Dean of students (students'patron), the students' president, the students' cabinet and the entire student body.

The Dean of students has a key role to play in establishing student support in the college. Since she is the students' patron, she has more chances of meeting students as individuals as a group. A supportive Dean will, in most cases, create a supportive atmosphere among students through Convincing the student president and students cabinet first and later the entire students' body But a weak and unsupportive Dean will always, with many excuses, fail to convince a reasonable number of students A Dean of students, therefore, must be a statesman for solid student support to be cultivated and maintained.

The student president should be a flexible and dependable person, someone who can command respect and pursuade others for a right cause. Under such leadership student support in college innovations can be achieved. However, where college administration is weak the student president can not do much.

The students cabinet if well elected and constantly guided can steadily steer the student support so that college innovations face the least resistance. In case the student cabinet does not support a programme then all efforts time and probably money to run that programme will have been dumped into a deep pit.

It is useful to realise that the entire student population is the owner of all innovations in a college, As we may all know. the more people there are the more personalities there are and hence the problems. The entire students level needs a combined effort from the top management, staff, the Dean. Student president and cabinet to convince every student to get Involved in college innovations. A programme without the support of students has very few chances to succeed.

CONCLUSION

A struggle to achieve educational excellence and national prosperity necessitates well thought out Teacher Education Programmes and Practices, The programmes Should be community based so that the trainee is prepared to handle the present and the future social, economic and political problems in the community he/she will teach in.

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[16] Kazdin A. Treatment of Antisocial Behaviour in Children, 1985 The Dorsey Press P. 17.

Callahan and Clark, Teaching in the secondary class, 1985

Chaffe J. Critical thinking

Curzon L.B. Teaching in further education 4th Edition; Cassell Educational Ltd., 1990.

Goldby M, Greenwald J. Curriculum design, 1979.

Harvard education review volume 64, No. 1, 1994.

Kazdin A.E, Treatment of Antisocial Behaviour in Children and Adolescence, The Dorsey Press, 1985.

Kiggundu-Mukasa, Success in practice teaching, Crane, 1996.

Mugeere A., New Vision Newspapers, 19/10/96

Mel Ainscow, Teacher education resource pack, Module 4, The University of Manchester.

Ornestein A.C, The State role in school reform, The education digest, March 1992.

Professors World Peace Academy, 2nd Regional Conference, July 22 25, 1987.

Radford J. and David Rose, Society for research into Higher education and open University Press, 1989.

Shaeffer Sheldon, Participatory approaches to teacher education Guiana Conference, Oct. 1996.

Stoner and Freeman, Management, 1995

The success of any Teacher Programmes and Practices will greatly depend on the commitment of the Principals, staff and students; social, economic and legal empowerment to Principals and staff by governments and non -governmental organization; reflection of the administration and staff; the examination of systen that caters for VOTE and well cultivated and maintained student support.

RECOMMENDATIONS

In order to improve the quality preparation of any nation's teachers through continuous reform of pre-service and in-service programmes and practices I would recommend that:

1. Teacher Education is looked at in totality whereby tutor trainers, teacher trainers, trainees, teachers and the pupils are considered.

2. Personal culture is emphasized above anything else within the Teacher Education programmes.

3. Teachers Colleges should always focus on school reforms through high staff commitment, empowerment and reflection plus all round assessment and high degree of Student support .

4. Governments and Non-governmental organizations should always begin with pre-service end service TEPP while establishing school reforms.
5. Community Based Teacher Education Programmes (COBATEP) are initiated, implemented and evaluated to serve both rural and urban areas of a country.

6. Student -teachers or student-tutors should spend most of their time in the field where the school reforms are conducted other than in the colleges where theories are learn't from.

7. Teachers' colleges should always develop projects leading to programs under the theme, " Quality Preparation for Educational Excellence and National Prosperity - QPEENP" My college has developed many like the .Peer Observation Project POP" which I have with me.

8. Non-governmental organizations should be more vigorous to support college-level programmes focusing at 'Quality Preparation for Educational Excellence and National Prosperity.
9. There should be a healthier relationship among our teachers' colleges and schools in the world; whereby there is an exchange of programmes, research findings and or personnel and practiced. My college is ready to arrange this.

References

Adams R. and Chen D, The process of educational innovations, UNESCO, 1981.
Alan Paisey, The effective teacher, 1983.
Armstrong M, A handbook on human resources management, Kegan Ltd. 1988,
Bennett R; Management, Longman UK, 1994.

REINFORCING NEW VISIONS FOR THE COLLEGE OF EDUCATION IN JORDAN TO FOSTER SCHOOL REFORM

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Jordan

INTRODUCTION

Anthropologist Margaret Mead (1970) once said "No man will ever again die in the same world in which he was born". Her theme of change certainly applies to the field of teacher education. Therefore, we must recognize that we are preparing teachers for the twenty - first century, for a time and place that is difficult for any of us to even imagine effectively.

All facets of the teacher education program need to be examined if the education agenda for the twenty - first century has any hope of being realized. Some practices need to be preserved and enhanced, some need to be abandoned, others have to be invented. It is the overall countenance of teacher education rather than any of its parts that needs reform. Merely tinkering with programs is not a sufficient reform. The system needs a complete overhaul, not just more tinkering.

Teacher education in Jordan lacks a sense of efficacy. If Jordan is going to have an educational renaissance, colleges that prepare teachers need to change most of their practices. The new college of education will have as its prime focus the preparation of professionals for schools. Its work must be predicated on the assumption that fundamental changes in the preparation of teachers can lead to a positive change in the public schools. The improving quality and vitality of teacher education will determine the health of our schools for the foreseeable future

The purpose of this paper is to draw the attention to some salient features and growth points of teacher education in Jordan. Criticism of teacher education is frequently based on a desire to improve the public schools. The message has been to reinforce new visions for the college of education to foster school reform.

The definition of what a teacher education program ought to be is not a matter of one man to decide. One can still speculate as he pleases, and one man's speculation may provide a ferment to the thinking of others. (Combs, 1965). It should be noted, however, that there is mounting concern about the quality of our teachers and the need for recognizing teaching as a prestigious profession.

Schools are under intense scrutiny and subject to frequent call for reform. The message that comes across loud and clear is that teaching is by no means a simple skill that any one who can stand and deliver can perform. No program of what I am aware of has attempted to incorporate even a significant segment of the knowledge base that is essential for student teachers to learn before they teach on their own.

People everywhere are taking a good hard look at our schools to find out if they truly meet our needs. Some of the improvements we seek in education can be brought about by building better schools, by introducing new courses of study, or new equipment. But the truly important changes will only come about as teachers change It is the behavior of teachers in classrooms that will finally determine whether or not our schools meet or fail to meet the challenge of our times (Shuttenberg, 1983). It is the teacher who can shape the mind and build the character of the student. We can assume that the quality of education our children receive links directly to the knowledge, intelligence and professional skills of teachers. If we want to give our young people the best education possible, we must first provide the best education and training to those who will teach them. But the quality of teachers will not be improved unless we improve the quality of their education (Allen, 1975). The major outcome of this paper will be a "blue print" for a new teacher preparation program. This will be taken as a point of departure for envisioning the future of the colleges of education in Jordan.

THE CONTEXT OF TEACHER EDUCATION

Our esteemed predecessors realized that the future of nations lies in building firm educational foundations. This, in turn, is dependent on the attention given to the preparation and training of the teachers who form the framework of these vital foundations (Shapiro, 1988).

Part of the societal context of the college is a widespread perception that public schools educate young people inadequately to live in a changing world.

Societal forces demand that universities in general and colleges of education in particular, become involved in helping the country cope effectively with a rapidly changing set of conditions (Beckman, 1984).

Schools are failing to teach the basic skills or to develop the intellectual processes necessary for a global society in the next century.

Three critical determinants of effective teaching are: subject matter, educational knowledge, and pedagogical skills (Doyle, 1990). All available evidence indicate teacher inadequacies in these areas. The school is worth precisely what the teacher is worth and for this reason an improvement in teacher education is a first step in any educational reform. We cannot improve the quality of education in our schools without improving the quality of teachers in them. At the same time, colleges of education cannot improve the teacher preparation programs without seriously examining their missions, curricula, methods and techniques of instruction, staffing, modes of organization and outreach activities.

COLLEGE AND SCHOOL REFORM

Change in its broadest view is the modification of existing conditions in response to present forces or future needs.

Change in education is not a period of turmoil between steady states, but an aspect of the norm, something which should be built into our procedures through evaluation, appraisal and review.

Teachers are not only a key factor in the provision of basic education but a key partner in educational development (Shulman, 1987).

Introducing change and innovation in school systems require that teachers themselves are aware of the need to change, fully commit themselves to such change, and are able to understand and actively participate in the reform process (Roth & Pipho, 1990).

The quality of teaching and learning, in terms of both content and methods, must be improved to enhance educational achievement.

Real learning is the true measure of progress. Real learning is to instill in students all the principles and values that will allow them to be themselves, to design their own destiny, and to make their own choices. In addition, raising admission standards to teacher education programs and testing teachers' knowledge prior to certification are among the proposed teacher preparation reform. Restricting access to and exit from colleges of education would increase the number of academically able people who become teachers and this, in turn, would improve the quality of teaching in our schools.

Colleges of education only one of the agencies that must collaborate in reform efforts. Other agencies policy makers should contribute to it.

Local schools and colleges of education could join in common effort to provide a teacher education program that strives for excellence. Seeking excellence in teacher education is a shared responsibility (Feistritzer, 1984).

There are considerable problems, obstacles end points of tension that could modify the long-term effect of the reform:

1. The basic reforms are expensive. They assume that teachers will be compensated at higher levels, that more money will be spent on teacher training.

2. The effort to reform teacher education is complicated by the joint conditions of low mysticism and low confidence.

The familiarity of the public with the classroom has also supported a common misconception that teachers and teacher educators can reform themselves. A field that is insecure in its relationship with its clients is more likely to be conservative in its efforts at reform. (McClelland & Varma 1989). The erosion of public confidence in schooling established a platform from which to launch programs to improve performance in individual schools.

EFFECTIVE TEACHING, TEACHERS, AND STUDENTS

The question of effectiveness, that is, who are the best teachers or what is the way to teach, usually takes the form of a statement or claim about the relationship between:

a) Teacher characteristics or teaching practices.
b) The attainment of some valued educational outcomes.

Good research would enable educators to determine the best techniques and behaviors for effective teaching. These, in turn, would be taught to teachers, who could then develop the skills needed to teach well. Some supervisors say that they cannot define good teaching but can recognize it when they see it. Effective e teaching cannot be defined because the criteria differ for every instructional situation and every teacher. (Cooper, 1986). But despite this pessimistic point of view, there are, still, some characteristics that could be attributed good teachers, good teaching, and good students and schools.

Efforts are being made to identify essential teaching skills to be developed in the teacher trainee and classify them as:

a) Common skills essential for all teachers
c) Specific skills necessary for teaching certain subjects at different age levels.

Obviously, the mission of teacher preparation program is to identify and prepare effective teachers, but little consensus exists on what an effective teacher means.

938

Knowledge of content is undoubtedly necessary for a teacher to be effective, but its in no way assure competence.

Therefore, it is our intention to create teachers who are knowledgeable about the subjects they will teach, knowledgeable about how children learn those subjects, able to create learning environments in which procedures and concepts become meaningful and useful to the learner (Cooper, 1986).

A good teacher must be characterized by the following characteristics: (Cooper, 1986; Martorella 1986, Ornstein & Levine, 1981).

1. Knows subject matter in depth and related subjects.
2. Applies different instructional methods.
3. Engages in professional growth activities.
4. Knows learning theories.
5. Creates a favorable environment for learning .
6. Obtains students' involvement in learning.
7. Acquires certain skills such as: Writing instructional objectives, lesson preparation, questioning, teaching concepts, interpersonal communication, classroom management and evaluation.

Martorella (1996) characterized the students who emerge from such a good teacher, as reflective, competent, and concerned. Reflective students are critical thinkers who make decision and solve problems on the basis of the best evidence available. Competent students possess a repertoire of skills to aid them in decision making and problem solving. Concerned students investigate their social world, address issues they identify as significant, exercise their rights, and carry out their responsibilities as members of a social community.

Effective schools can be characterized by the following: (Rich, 1992)

1. A clear sense of purpose.
2. A core set of standards within a rich curriculum.
3. A safe, orderly learning environment.
4. A sense of community.
5. A resiliency and problem solving attitudes.
6. A set of clear rules and standards for behavior.

PROBLEMS AND SOLUTIONS

The education of our nation's teachers lies at a critical juncture. Immediate actions in any number of areas are required if we in teacher education are to restore our credibility to acquire the mandate to prepare the teachers of the future I refer to these actions as imperatives and have identified 12 of them:

1. STUDENT ADMISSIONS REQUIREMENTS

With the exception of the highly publicized shortage in certain fields and in certain geographic regions, supply will continue to outstrip demand for several years. Now, in Jordan, we have an oversupply of teachers. This fact makes it feasible to raise requirements for entrance to the teaching profession.

To date, teachers are admitted to enter the colleges of education mainly on the basis of academic scores. The common credentials used in admission is the General Certificate of Education grade point average (GPA).

Selection is a form of evaluating an individual's capacity, potential or aptitude to be successful in job performance. The criterion currently used in Jordan in selecting prospective teachers does not predict job performance and, therefore, need to be reviewed and strengthened immediately.

The level of academic aptitudes of the students body from which potential teachers are drawn as well as the exit standards must be raised. We can. also, work for the creation of incentives for qualified students to enter the teacher preparation programs and continue on into teaching One such possibility is advocating scholarships.

Colleges of education must attract Students of good quality potential who can be expected to achieve a high level of academic performance and professional skills. Gatekeeping or control of entry to the profession is one of the major functions (Gephart & Ayers, 1988).

In a situation of teacher oversupply it becomes much easier to give more attention to the quality of teaching. Attempts should be made to refine ways of selecting students with the best prospects of becoming competent teachers.

If a college of education seeks to be more selective in its admission to teacher preparation, then on what basis should admissions be made?

Admissions decisions should not be made separate from the context of the teacher education program at the college. A clear link must be established between the mission of a particular institution and its criteria for selecting students to fulfill that mission (Ornstein & Daniel, 1981).

The first step in affecting change in the admissions process is the development of a forum for admissions among these individuals who educate our students. The forum will meet to develop a set of criteria.

There is a growing concern for obtaining student teachers of a high calibre by using stricter screening methods and raising the minimum grade point average for admission. We, simply, cannot sit back and wait for the best students to find us or use single criterion like grade point average to sort and select students. We must attract and recruit the kinds of students we want.

There are few categories of qualities that must be possessed, at least at a minimum level, such as intellectual ability, communication skill, physical health. emotional stability and mental health. There are, also, personal factors that are widely accepted as desirable in teachers. In some places, students must write an essay entitled "Why I want to be a teacher". Students should support their claims with evidence of experience as community work and involvement with children and youth.

In short, the teaching profession should attract the keenest minds, the finest personalities, and the most humane people.

2. *TEACHER INDUCTION PROGRAMS*

Training is an integral part of professional preparation. It prepares student teachers to do something with what they have come to know, that is, to put knowledge into practice. Ideally, training in a profession implies having knowledge of some phenomenon and being instructed with regard to how to use it (Huling - Austin, 1990).

Training must be available to the teachers who may have to meet problems that were not envisaged in their initial training. It should provide what a teacher needs in order to make a confident start in his or her career and a base on which subsequent training can be profitably built. It is very important for continuing professional development, and for enhancing teachers' pedagogical and curricular knowledge.

An induction program is a planned program intended to provide some systematic and sustained assistance, specifically to beginning teachers for at least one school year. (Brooks, 1987). This program is necessary to assist beginning teachers in making the transition from novice to experienced professional. School-based in service training has an, important part to play here, since it takes into account the immediate circumstances and constraints of a school. A year long training in a school would be similar in function to a teaching hospital for physicians (Smyth, 1988; Acheson, 1987). This training should include both actual teaching as well as the other duties of teachers. Initial or provisional certifications may be provided upon successful completion of course work and induction program. In Germany, after graduation, all teachers must complete an additional one and a half to two years of induction in special state teacher training institutions (Klinzing, 1990).

3. *CERTIFICATION*

To ensure that all school teachers have the appropriate academic preparation, a national certifying board for teachers or a national council for accreditation of teacher education must be established.

The board or the council will:

a) Assures the public that accredited colleges of education offer programs that meet national standards of quality.
d) Ensures that students are served by well prepared teachers.
c) Encourages institutions to meet rigorous academic standards of excellence in professional education.
d) Assures society that each teacher possess the proper knowledge, skills, and abilities to practice that particular profession.
e) Protects qualified professionals from the competition of unqualified persons.

The achievement of these objectives requires the identification of criteria for initial certification, requirements for renewal or maintenance of a certificate, and measures to guarantee that only certified professionals teach in schools. The board or council will define what teachers need to know and be able to do and award nationally recognized certificates to qualified candidates.

Teacher certification means giving legal recognition to an individual to teach at a particular grade level or in a certain subject. The government is the legal source of teacher certification standards. Usually, this is in conjunction with advisory groups, staff, and voluntary affiliation with related professional organizations.

Nations could conduct public hearings prior to the development of certification regulations. Teachers, teacher educators, parents, and representatives of business and industry are asked to comment on the proposed standards prior to final adoption (Watts, 1984).

The assessment efforts typically involve some combination of standardized paper - and - pencil measures of relevant teaching and subject - matter knowledge In addition, teachers sometimes are asked to create portfolios of items such as sample lesson plans, examples of students work, and videotapes of teaching

Qualitative assessments of teachers may occur in a special facility known as a "teacher performance assessment center". Assessment centers include components

941

such as written assessments, direct observation of practice by trained observers. Candidates are required to come to a center where they are asked to demonstrate in simulated environments competencies related to teaching in their subject area. For example, a math teacher might be given the task of planning and leaching a new lesson within a specified block of time. The teacher then would teach the lesson to a small group of students who might have been coached to play certain roles during the lesson (Shulman, 1987).

In the United States, for example, all fifty states have specific standards which teachers must meet before they are certified to teach in the public schools. The State of Oklahoma requires applicants for initial certification to pass competency examinations in their teaching field (s) and to serve one - year internships in the classroom under the supervision of a three - member committee consisting of a practicing school teacher, a school administrator, and a college professor. Before a candidate can be certified, the committee must confirm that he/she has demonstrated the appropriate pedagogical knowledge, skills and abilities necessary for effective teaching (Zimpher & Howey, 1990).

In Japan, a teacher of an elementary or secondary school, should acquire a teaching certificate granted by the perfectural board of education (Sato & Ushiwata, 1990).

4. *INNOVATIONS IN TEACHER EDUCATION*

Colleges of education prepare candidates in the prevailing norms and practices of classrooms and schools. The ideal teacher in this framework is one who can efficiently cope with the real world of schooling. The emphasis is on training for the job of teaching as it exists.

Teacher education should be a source of renewal and innovation for schools, rather than accommodating the so-called realities of schooling (Spodek & Saracho, 1990). The sole purpose of teacher education is not to train teachers for the schools as those institutions are today, but rather to provide such new teachers with understandings and abilities which will enable them to play a role in improving our schools (Dembo & Gibson, 1985).

It is especially ironic that many of the same critics who argue that today's Jordanian schools are inadequate to our national needs would rush to have teachers in training spend all their preparation time serving as apprentices in those same apparently inadequate classrooms. They would have new teachers learn by example from the current teachers whom they the critics, have already indicted as inadequate It *would be a short-sighted* only for conditions in today's classrooms and schools.

Schools must touch the future. As Shane and Tabler note in "Educating For a New Millennium", "We need schools that create a curriculum that anticipates tomorrow" (McCaleb et al, 1987). As teacher educators we must have a similar vision, for we must remember that we are preparing teachers not for today, but for the next century. We must find means by which we can keep ourselves not only up to date, but also ahead of school - related matters perceived relevant by classroom teachers. This is the entire key to our credibility in the profession.

5. *TECHNIQUES OF TEACHING*

Teachers in the colleges of education are often employing the practices of recitation and memorization as a means toward gaining knowledge.

Teacher educators take as evidence of learning the students ability to reproduce th teacher s talk when all they are likely to have learned are words (Howey 1983). Being able to remember the teachers words is the shadow of learning. The substance of learning demands experience of the real world.

6. *RELATION OF THEORY TO PRACTICE*

Theory is knowledge useful in helping student teachers teach more effectively. If theory does not help students to teach so that they realize it is helpful' then it is not helpful (Cruickshank & Metcalf 1990).

Theory and practice illuminate each other. If theory does not seem to work in practice we must examine both to find out why. Testing one against the other helps us determine their utility and understand both more fully.

Theory and practice must be integrated in any instruction devised for student teachers. Theory must relate to school and classroom and teaching experiences. It is impossible to demonstrate the relevance of theoretical constructs to teaching by lecturing to students. Nor it is good enough to declare that student teachers will see the relevance later when they have been teaching for sometime.

Teacher educators therefore ask student teachers to accept some of the most important aspects of their preparation as matter of faith whose utility will become clear at some future time by a mysterious process of revelation.

7. *REFLECTIVE TEACHING*

One can hardly pick up a professional journal or attend a professional meeting these days without encountering the term "reflective teaching". Much interest has centered recently on reflective teaching and the role of reflection in teacher preparation programs.

Most teachers concern themselves with subject matter, which includes both basic skills and academic content. Reflective teachers emphasize two additional considerations: (Cruickshank, 1985; Smith,1994)

1) What is the relationship between what I am trying to teach and my students' past experience?
2) What is the relationship between what I am trying to teach and my students' personal goals.

In metaphoric terms, students are not just vessels into which the teacher pours knowledge. Instead, students are builders of knowledge who actively construct the meaning of their lessons on thefoundation of both their past experiences and their personal purposes (Zeichner & Liston 1987).

Reflection involves a critical examination of ones experience in order to derive new levels of understanding by which to guide future action (Ross 1994).

John Dewey (1938) is acknowledged as a key originator in the twentieth century of the concept reflection. He considered it as a special form of problem solving thinking to resolve an issue which involves active chaining a careful ordering of ideas linking each with its predecessors.

8. *COOPERATIVE TEACHING*

Awareness of the total teacher education program and process seem to be a key element in a joint venture between a college of education and local school (Boyd 1994).

Preservice teachers need mentors. Cooperating teachers as mentors can tutor coach and advise student teachers. The exchange and interaction between the two groups can be mutually beneficial.

Student teachers need constructive, immediate feedback regarding their teaching efforts No person can be in a appropriate than the cooperating teachers to provide such feedback. This kind of clinical supervision uses the pre-observation conference, classroom observation, and the post-observation conference (Zimpher, 1980). It is a set of learning opportunities that take place in ongoing real world classrooms and schools.

The cooperative teacher can exert influence at appropriate tunes to make procedures in schools easier for preservice teachers (Teitel, 1994).

The cooperative teacher who is involved in the development of teacher education programs should be aware of the course work and processes to which the student teacher has been exposed before coming into the field.

9. TECHNOLOGY AND TEACHER EDUCATION

Because of the technological change and global competition, students in public schools should be equipped with skills that go beyond the basics.

Gaining computer literacy and technology know-how improves teachers' image and allows them to be in touch with the progress in the age of information as well as the state of the art in various scientific fields (Brooks & Kopp, 1989). Technology is maturing quickly and the cost of hardware is decreasing and storage capabilities are geometrically increasing.

Colleges of education are not taking a convincing or focused leadership role in identifying solid evidence about the applications of technology to teacher training.

In short, the technological age has yet to significantly influence teacher education. Therefore, we must infuse technology throughout the college and create an array of classroom and laboratory facilities to meet the technological needs of the academic community.

10. MICRO TEACHING

One of the promising developments in teacher education has been the use of microteaching. This technique is a more specific technique, which breaks down learning into separate items of study with a view of them being mastered on a step-by-step basis.

Microteaching is operationally defined as a brief teaching encounter in which preservice prospective teachers teach five to twenty-minute lessons, in their subject field, to a small group of students who are usually peers (Allen, 1980). The purpose of microteaching lessons is to demonstrate specific technical skills of teaching until the preservice teacher reaches an acceptable level of performance. The focus is on particular learning objectives for the teacher candidate through which evaluation and feedback are provided. The use of this particular technique in the college of education is very limited and needs to be enhanced.

11. LEADERSHIP TRAINING

Leadership training for student teachers is a recent innovation. The training program emphasizes the development of physical and mental endurance, the acquisition of personal survival skills and the development of organizational and managerial skills to cope with stress and emergency situations (Rich, 1992).

12. PART-TIME TEACHING

Some colleges of education use part-time teaching staff in their teacher education programs.

The contributions of part-time faculty to the quality of teacher education program is debatable. Part-time faculty are usually paid substantially less than full-time staff. Consequently, colleges may be tempted to base part-time staffing decisions on financial instead of professional considerations. Measures to ensure the competency of part-time staff do not appear particularly effective.

FINAL NOTES

I know from my own years of experience as a teacher education faculty member as well as from my observation of programs in four different Arab countries that there has been no fundamental or substantive changes in teacher education during the last two decades.

Therefore, Jordan, among other Arab countries, needs to design and implement new future for the colleges of education. I have personal personal reasons to believe that such new future is not only feasible but very rewarding.

I call for a new generation of teachers and teacher education programs and for a nationwide commitment to excellent teacher education, and schools. I call for more rigorous academic and performance standards for admission and graduation from colleges of education. I, also, call for new vision, methods and techniques, curriculum, and assessment. My hope is that the ideas provided in this paper can be used to improve the quality of programs for preparing teachers, so that teachers in the future will be better prepared and students in the future will be better educated

I offer this only as personal observation, with no blanket indictment intended. Every reform was once a private opinion. My message may be private but I wish to share it with many others in the field of teacher education. To what extent this paper will result in success for Jordan school children remains to be seen.

References

Acheson, K. & Gall, M. (1987) Techniques in The Clinical Supervision of Teachers. New York: Longman.

Allen, Dwight (1975). The Future of Education- Where Do We Go From Here? Journal of Teacher Education 26 (1). 41-45.

Allen, D. (1980). Microteaching A personal Review. British Journal of Teacher Education. 6 (2), 147-151.

Backman, Carl (1984). Moving Teacher Education Toward the Twenty-First Century: Reflection of a New Dean Journal of Teacher Education. 35 (1). 1-5. 1

Boyd, Pamela (1994). Professional School Reform and Public School Renewal: Portrait of a Partnership. Journal of Teacher Education.45 (2). 132-139.

Brooks, D. (Ed.) (1987). Teacher Induction: A New Beginning. Reston: Association of Teacher Educators.

Brooks, Douglas & Kopp, Thomas (1989). Technology in Teacher Education. Journal of Teacher Education. 40 (4). 2-8.

Combs, Arthur (19) I he Professional Education of Teachers. Boston: Allyn and Bacon, Inc.

Cooper, James (Ed.) (1986). Classroom Teaching Skills. Washington: D.C: Heath And Company.

Cruikshank, Donald (1987). Reflective Teaching: The Preparation of Students of Teaching. Reston: Associations of Teacher Education.

Cruickshank, D. (1985) Uses and Benefits of Reflective Teaching. Phi Delta Kappan. 66 (10) 704-706.

Cruickshank, D. & Metcalf, K. (1990) Training within Teacher Preparation. Handbook of Research on Teacher Education. New York: Mcmillan, Inc.

Dembo, M. & Gibson, S (1985) Teachers' Sense of Efficacy: An Important Factor in School Improvement. Elementary School Journal. 86 (2), 173-184.

Dewey, John (1938). Experience and Education. New York: Collier Books.

Doyle, Walter (1990). Themes in Teacher Education Research,. Handbook of Research on Teacher Education. New York: Macmillan Publishing Company.

Feistritzer, C (1984). The Making of a Teacher: A Report on I Teacher Education and Certification. Washington D.C: National Center for Education Information.

Gephart, W & Ayers, J (Eds). (1988). Teacher Education Evaluation. Boston: Kluwer Academic Publishers.

Howey, K (1983). Teacher Education: An Overview. Howey, K & W Gardner (Eds) The Education of Teachers New York: Longman.

Huling-Austin, Leslie (1990) Teacher Induction Programs and Internships. Handbook of Research on Teacher Education. NewYork: Macmillan, Inc.

Klinzing, Hans (1990) Research on Teacher Educator in West Germany. Research in Teacher Education: International Perspectives. London: The farmer press

Levine, Daniel & Ornstein, Allen (1993). School Effectiveness and National Reform. Journal of Teacher Education. 44 (5). 345.

Martorella, Peter (1996). Teaching Social Studies in Middle and Secondary Schools New Jersey: Englewood Cliffs.

McCaleb, Joseph et al (1987). Innovation in Teacher Education: The Evolution of a Program. Journal of Teacher Education. 38 ((1) 57-64.

McCleland, V & Varma, V (1989). Advances In Teacher Education. Worcester: Billings & Sons Limited.

Mead, Margaret (1970) Culture and Commitment. New York: Doubleday.

Ornstein, Allan & Levine, Daniel (1981). An Introduction to the Foundations of Education Boston: Houghton Mifflin Company.

Rich, John (1992). Innovations in Education: Reformers and Their Critical Boston Allyn and Bacon.

Ross, E. Wayne (1994). Reflective practice in Social Studies. Washington D.C: National Council for the Social Studies

Roth, Robert & Pipho, Chris (1990) Teacher Education Standards book of Research on Teacher Education. New York: Macmillan Publishing Company.

Sato, Akira & Ushiwata, Jun (1990). Research on Teacher Education in Japan. Research in Teacher Education: International Perspectives. London: The Falmer Press.

Shulman, Lee (1987). Knowledge and Teaching: Foundations, of the New Reform. Harvard Educational Review. 57 (1). 1-22.

Schuttenberg, E (1983) Preparing the Educated Teacher for the 2 1 1st Century. Journal of Teacher Education, 34 (4). 14-17.

Shapiro, E. (1988). Teacher: Being and Becoming. New York: Bank Street College.

Smith, Gregory (1994). Preparing Teachers to Restructure School. Journal of Teacher Education 45 (1) 8-30.

Smyth, J. (1988). A Critical Perspective of a Clinical Supervision. Journal of Curriculum and Supervision. 3 (2). 136-156.

Spodek, Bernard & Saracho, Olivia (Eds.). (1990) Early Childhood Teacher Preparation. NewYork: Teachers College Press.

Teitel, Lee (1994). Can School - University Partnerships Lead to the Simultaneous Renewal of Schools and Teacher Education Journal of Teacher Education 45 (4). 245-252.

Watts, Doyle (1984). Teacher Education Should Be Certified. Journal of Teacher Education. 35 (1). 30-33.

Zeichner, K. & Liston, D. (1987). Teaching Student Teachers to Reflect. Harvard Educational Review. (57) 23-48.

Zimpher, N & Nott, D (1980) A Closer Look at University Student Teacher Supervision. Journal of Teacher Education. 31. 1 1-15.

Zimpher, Nancy & Howey, Kenneth. (1 1990). Scholarly Inquiry into Teacher Education in the United States. Research in Teacher Education: International Perspectives: London: The Falmer Press.

WHAT SPECIAL ABOUT PROVIDING INSERVICE COURSES FOR TEACHER TRAINING: WHEN TECHNICAL AND COMMERCIAL PERSONNEL BECOME TEACHERS

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INTRODUCTION

In Hong Kong, teachers may enter the profession without prior training. Most of them attain their professional qualification eventually by part-time study. Thus, in strengthening the professional teaching force, teacher educators need to examine how inservice courses are run and how the practicing teachers learn in the training institutes. The factors which determine the teacher's efforts in participation vary and differ among adult learners (Daines, et al., 1994). There may be constraints such as the availability of time for studies; their motive and needs (Rogers, 1971, 1986), their attitudes towards inservice training and the attraction of these courses in terms of quality and relevancy (Hopkines, 1989). In order to provide better programmes for practicing teachers, more understanding has to be sought on the approach they adopt in their studies, the constraints and the feedback from the participants about the programme. In short, the researchers regard teachers attending inservice courses as a particular group of adult learners who need special attention about how they learn, why they learn in a particular way and what is best for them to learn.

THE PRESENT STUDY

The present study tried to seek a better understanding on the practicing teachers as adult learners in teacher training. The study is exploratory. Not only that every learner is unique but also little has been done to reveal about the way they study and the reason why they study[1]. The study begins with the assumption that adult learners' commitment, needs, motive and attitude influence the approach of study they adopt (Dunkin and Biddle, 1974). That is to say, with different needs and preference, students will develop a certain approach towards a learning task (Biggs, 1992). It is crucial for teacher educators to understand the approach the participants adopt. So, the first objective of the present study is to determine the students' learning approach by using the Study Process Questionnaire (SPQ) (Biggs, 1992). A follow-up interview was carried out to find out the causes affecting their studies and whether the programme is relevant to their vocational and professional needs (National Institute of Adult Education, 1970). It is important to note whether the 1997 issue has any effect on participants of inservice teacher training course. Accordingly, the study tries to answer three specific questions:

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[1] The authors of the study are grateful to Professor J.B. Biggs for his questionnaire (Biggs, 1992) and his insightful discussions in his work on learning approaches. Professor J.B. Biggs (1992) has carried out extensive research on why and how Hong Kong students learn. These studies include primary, secondary and tertiary students. However, his studies do not include any work on the inservice teachers discussed in this paper.

1. What kind of approach(es) is adopted by the practicing teachers in the inservice teacher training course?
2. What are the factors leading to the adoption of a particular approach?
3. What kind of training in terms of course structure and framework should be provided to these adult learners to meet their professional needs in the transitional era?

BACKGROUND OF STUDY

On Approaches Of Learning

According to Biggs (1992), students construct knowledge from their own perceptions, needs and existing resources. There are several ways of going about learning, some leading to good, well-structured outcomes, others to low level outcomes. There is no right way of studying. It all depends on what suits one's style and the courses one is studying.

The idea of 'Approaches to learning' is developed by Marton and Saljo (1976) in their identification of surface and deep approaches in case studies of tertiary students. An approach to learning has two components: motive and strategy. How you approach a task depends on why you want to approach it in the first place. This combination of motive and strategy is called an approach to learning. The three common approaches are surface, deep and achieving.

There are 6 sub-scales as expressed by Biggs (1992), namely the surface motive (SM), deep motive (DM), achieving motive (AM), surface strategy (SS), deep strategy (DS) and achieving strategy (AS). From the students' point of view, there is a motivational question, and a question of strategy. For surface approach, the motive is extrinsic and learners try not to be working too hard but they will do the minimum to avoid failure. For deep approach, the motive is intrinsic and learners have personal commitment in learning. It involves higher cognitive level skill than rote learning. For achieving approach, learners learn in order to get high grades or win prizes.

The SPQ is designed to assess the extent to which university and polytechnic students endorse different approaches to learning by identifying the motive and strategies that comprise those approaches. The original version (Biggs, 1987) of the instrument is designed by Biggs for the Australians. A new version of SPQ (Biggs, 1992) is designed for the Hong Kong university and polytechnic students. Biggs (1992) reports an acceptable reliability, internal factorial validity and construct validity of the Chinese version of the SPQ for students in Hong Kong.

The instrument is an effective tool to provide valuable information for teachers and instructors about learning approaches of their students. How teachers teach and test would affect what and how students learn. The instrument can be very useful in student counseling, as well as curriculum planning.

On Understanding And Educating Teachers As Adult Learners

Every participant has a different reason to learn. Adult learners differ in their background, biography and aptitude (McFann, 1972). There is no exception for inservice teachers. They are unique and different from each other. Rogers (1986) explains the difference in learning orientation among adults as a result of their response to the 'realities' of life. The interaction of these variables will determine the ways they go about learning; the surface, deep, achieving approaches as introduced by Biggs (1992).

While Biggs indicates the three major approaches in learning, Houle (1961) explains three main orientations of adult learners. The goal-oriented learners attend courses to achieve some specific external objective such as professional certificate. The learning experience of this group of learners will terminate once the objective has been achieved. The activity-oriented learners "seek social contact and activity rather than learning for its own sake" (Mackie, 1981, p. 6). They attend courses for they can get something out of the group or the activity The content of the learning is not their most immediate and important concern. The last group is the learning oriented learners. They have the strongest desire to learn and they seek knowledge for its own sake. They pursue the subject out of interest It is not difficult to find that a large part of the description portrayed by Houle fits quite well with Biggs's (1992) description of learning approaches.

One important way of understanding teaching adults is to distinguish 'andragogy' (Knowles, 1983) from pedagogy. There is a need to differentiate adults from children education. Knowles (1974, 1978) claims that adult learners in general are guided by the question of 'need' rather than the question of 'ought' as children learn in schools. In this respect, adult learning is more likely to be self-directed. The learning orientation of adults is best to be problem-centered supported by a variety of modes of learning and opportunities for practical use (Bryant, 1981).

The idea of andragogy also indicates that adults have much greater experience behind them and they also define themselves by their experience (Mackie, 1981). That is to say adult learners are not blank sheets. All adult learners "have some ideas of what they want and what they are going to get" (Rogers, 1986, p.xvii). Experience seems to be the key to self-actualization.

Another issue which complicates adult learning is that education for them is not their principal concern. Adult learners are constantly committed to the 'realities' of life: earning a living, looking after their families, and many other issues (Rogors, 1986). These adults are passing through different developmental phases (Havighurst, 1961). There are different developmental tasks associated with those phases. The success in dealing with these tasks is critical to the adult's personal and social life. This is especially true for these inservice teachers because they are playing different roles: parents, partners, workmates and students.

Teacher educators are facing a mixed group of participants with different background and needs. These adult learners have developed their own strategies and patterns of learning which they found relevant and useful to them. They are constantly making choices between different alternatives (Rogers, 1986). There is strong evidence that programs which allow teachers to find answers for their self-directed professional problems and to use their preferred modes of learning can empower teachers and create a sense of professionalism in training or re-training (Sparks and Loucks-Horsley, 1990). Programs or courses cultivating attitudes or empowering teachers can take the forms like workshop, project, or research. Teachers learn most efficiently when they can plan their learning activities on relevant tasks (Sparks and Loucks-Horsley, 1990). In addition, Gibbon and Norman (1987) assert that successful teacher training programs must give opportunities to aspiring teachers to work out their plans towards instructional excellence.

On Relationship Between Socio-Economic Change And Inservice Teacher Training

A brief description of socio-economic change caused by the 1997 problem is necessary. This is important in understanding why the course under investigation which recruited participants who were working in industrial and commercial sectors ended up in a teacher training course.

Hong Kong is facing great political changes for it is counting the days when it will be handed over to the Chinese sovereignty by the British government in 1997. Socio-economicwise, Hong Kong has seen massive removal of its manufacturing enterprises into China, especially the Guandong province and the Pearl River Delta because of the cheaper labour, land and its proximity to the Colony which facilitates transport and management.

According to a survey done by the Federation of Hong Kong Industries in 1991, out of a total of 1,256 enterprises surveyed, 46% of them indicated that they have either established or are going to establish their business in China. And the same survey revealed that no less than 47 billion Hong Kong dollars are invested in Hong Kong-related enterprises in China (The Federation of Hong Kong Industries, 1991). This massive removal also means massive unemployment or job loss for the local workers. In fact, in 1995, the Colony's Census and Statistics Department survey finds that over the decade from 1984 to 1994, the number of persons engaged in the local manufacturing industries has dropped by more than 55% due to the massive removal and immigrant workers (Hong Kong Government, 1995). The professionals and' semi-professionals who were previously engaged in such hard-hit enterprises such as toys, electronic and electrical goods, plastics, and metal-making have found their jobs lost in this socio-economic transition period. In their pursuit of a job that is most compatible with their technical know-how and experiences and with their 'hidden desire' for a more stable job, a teaching job in Hong Kong with its comparatively more attractive salary and more stable tenure system worldwide would surely be among one of the first considerations in their list of job preference.

METHODOLOGY

Subjects

The subjects of this research were students studying in the Hong Kong Technical Teachers' College (now become the Hong Kong Institute of Education). They were second year students of the two-year part-time evening Inservice Course for Teacher Training (Technical), also known as ICTT (Tech). There were 12 students. They were all invited to the study on a voluntary basis and all of them filled in the questionnaires and participated in the interview. They were practicing teachers with at least two years of experience in prevocational schools teaching technical subjects (such as Commerce, Design and Technology, Printing, Technical Drawing, etc.). They were non-graduate teachers who had no prior teacher training. These students were adult learners and their age ranged from 30 to 38. Four of them were married and two were parents with one child.

Instruments

The bilingual version of the Study Process Questionnaire (Biggs, 1992) was adopted. The SPQ is a 42-item, self-reported questionnaire. Each item is a self-reported statement of a motive or a strategy. The respondents rate themselves on the statement on a 5-point scale. A '5' indicates that the statement is 'always or almost always true' and a '1' indicates that the statement is 'never or only rarely true'. The item-ratings for each student's responses are added up for each subscale (surface motive, surface strategy, deep motive, deep strategy, achieving motive, achieving strategy). The questionnaires were distributed and filled in by the subjects in class time. Clear instruction was given before they answered the questionnaire and the administration took about 30 minutes.

The Follow-Up Interview

A follow-up interview was carried out. All the 12 students were interviewed each at a time in a classroom. Each interview lasted for about 30 minutes. A set of nine questions were constructed around the three research questions of this study for the interview.

The interviewer was allowed to analyze the ask other relevant questions in case the need arises. All transcribed afterwards. Both quantitative and qualitative procedures were used to analyze the results from the interview. Qualitative research procedures in particular were used for content analysis of the interview results (Bogdan and Biklen, 1992). The interview answers were first transcribed and recorded in small cards for coding purposes until relevant emerging patterns were found. Finally, three major themes were identified and discussed as major factors leading to the adoption of a particular approach in studying the course.

FINDINGS AND ANALYSIS

Findings And Analysis Of The Spq

The findings from the SPQ revealed that this particular group of adult learners showed a strong tendency adopting the surface approach in their study (as shown in **Fig.**1). According to Biggs's (1987) classification, the learner's motive is extrinsic. Learners of this category might try to do the minimum and would work hard only for the fear of failure. They usually ignore the meaning of what they are learning and are most likely to reproduce the things which they are expected to be tested or quizzed. It might not be surprising to find these adult learners adopting the least 'productive' approach to learning considering each learner might have heavy teaching duty in the school or other personal and social commitments. The interesting question is why they all adopted such a particular approach. Are there any reasons for this unanimity? The analysis of the follow-up interview will shed light on this question.

Reliability

The internal consistency reliability estimates of the scalesof the ICTT (Tech) students of the SPQ are shown in Table 1. The alphas varied from 0.72 to 0.84 in the subscale on deep approach and achieving approach. The internal consistency on these four scales (DM, DS, AM and AS) are reasonably reliable. However, the alpha values on the surface motive and surface strategy are 0.42 and -0.37 respectively. These values indicate that the subscales are not reliable statistically to interpret the scores obtained. It requires further study to know whether the ICTT (Tech) students are really adopting a very high surface approach in studying the course. The follow-up interview of the individual student helps to provide evidence for the findings.

952

Table (1)
Internal Consistency Reliability Estimates (Alpha)
of Responses to SPQ

SM	SS	DM	DS	AM	AS
0.42	-0.37	0.77	0.72	0.80	0.84

The Profile Of The Ictt (Tech) Students

The means and standard deviations of the ICTT (Tech) students responses to the SPQ scales are shown in Table 2. Figure 1 shows the profile of the students in the course on each SPQ subscale in comparing with the Hong Kong population. The Hong Kong population includes five tertiary institutions (Biggs, 1992). The population data are derived from Biggs' (1992) work.

The profile indicates a very high surface approach, but low on deep approach and achieving motive, and very low on achieving strategy.

Table (2)
Means, Standard Deviations and Effect Size of ICTT (Tech) students compared with the Hong Kong tertiary students.

		SM	SS	DM	DS	AM	AS
ICTT (Tech) Students	Group mean	25.50	22.00	21.17	21.42	19.92	17.00
N = 12	Group S.D.	4.08	2.59	5.01	4.74	6.64	6.45
Hong kong	Grand mean	21.18	19.67	22.68	22.57	21.18	20.86
Tertiary students	Grand S.D.	4.53	3.82	4.40	4.25	4.96	4.66
N = 5268							
	Effect size	0.95	0.61	-0.34	-0.27	-0.25	-0.83

- * Group means – The mean from the 12 students in the ICTT (Tech) Course
- * Grand mean – The mean of the Hong Kong Tertiary students. Data calculated from the data in Biggs' work (1992), pp. 99-109.

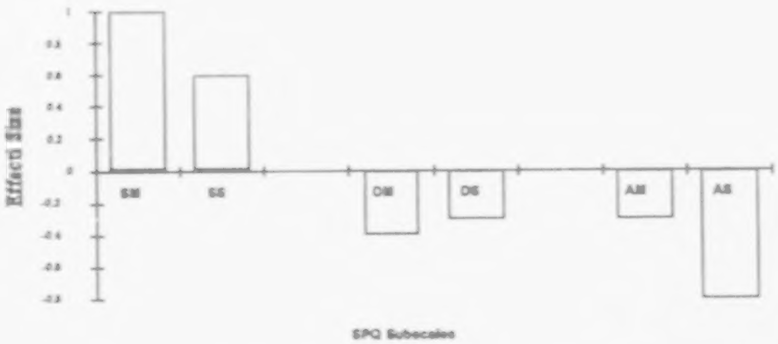

Fig. 1 Profile of ICTT (Tech) students

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Comparing the ICTT (Tech) students with the medical sciences students in Hong Kong reported by Biggs (1992)[2], the result of the t-tests statistically testing the significance of the differences between the means are shown in Table 3. It can be seen that they closely resemble each other, apart from the surface motive. The profile in Fig. 2 shows that the medical group has a higher surface strategy, lower on deep strategy and achieving motive (reproduced from Biggs, 1992).

Table (3)
Means, Standard Deviations and Results of t-test of Differences between Means of ICTT (Tech) students and students of Medical Studies responses to Scales of SPQ

		SM	SS	DM	DS	AM	AS
ICTT (Tech) students	Mean	25.50	22.00	21.17	21.42	19.92	17.00
N = 12	SD	4.08	2.59	5.01	4.74	6.64	6.45
Medical students	Mean	21.94	22.2	21.61	21.15	19.33	19.7
N = 294	SD	4.68	4.05	4.7	4.3	5.19	5.11
t Value (d.f.=304)		2.59*	-0.17	-0.32	0.21	0.37	-1.78

* *Significant difference at .05 level*

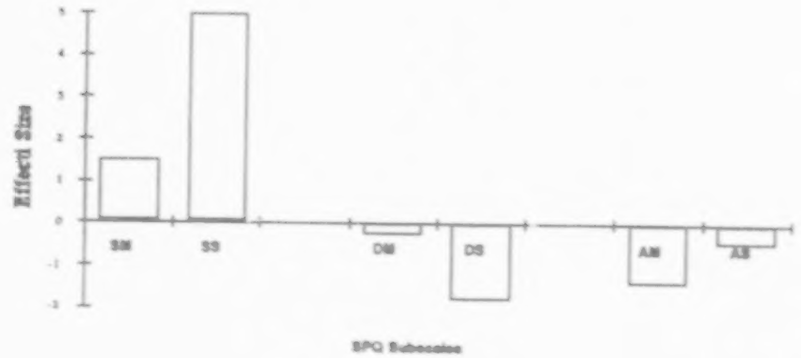

Fig. 2. Profile of Cluster of HKU Medicine and HKP Medical Lab Sciences Groups [adapted from Biggs' (1992)]

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[2] Professor J. B. Biggs (1992) provides separate tables of norms for each cluster for the Hong Kong tertiary students. There are eleven clusters which described different groups of students with similar characteristics from a variety of course programmes at various levels and a number of different academic departments. Comparing with the eleven clusters, the ICTT (Tech) group is found to match closely with the Medical Cluster (Table 8.1 1, Cluster H.5) with the least difference.

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Findings And Analysis Of The Follow-Up Interview

Three major themes were identified in supporting the findings of the SPQ. These themes explain why the group adopted the surface approach and strategy in their teacher training course.

Career Change In Hong Kong When Approaching 1997

Two underlying reasons governed their choice of profession: that teaching suited them ('more comfortable' and 'well-paid') and there was a need to change job (the 'industrial field was under the threat of economic recession', and 'many factories were moving northward to Mainland China'). A very small number of participants said they were committed to teaching and found the job interesting. When compared to their previous jobs, teaching was more attractive in terms of salary, working hours and promotion prospect. This, perhaps, has set the scene of how they perceived their profession and adopted the kind of attitude or belief towards their in-service training which led to certification and professional status.

Before joining the teaching profession, all these teachers were trained as technical or commercial personnel. They were reluctant or forced to change their jobs because of the socio-economic change in Hong Kong. They were attracted by the teaching profession in one way or another but they entered the teaching profession without good reasons. Some of the reasons heard in the interview were quoted as follows:

> *"It seems that there is less conflict of inter-personal relationship in schools and I feel more comfortable. Therefore I choose teaching as my career. " (Teacher A)*[3] *"I had been a designer, working, thinking day and night was a tough task. It [teaching] is a more stable job, there is no need to work over-time. (Teacher B) "I have tried some other jobs before teaching and I am not happy with these jobs. in fact, my interpersonal relationship in the previous organization was not good " (Teacher D) "Being a teacher is a stable job" (Teacher F) "My previous jobs were unstable. I need a stable Job and then I think of teaching." "I found my [previous] jobs were so tough that I thought of teaching. (Teacher I).*

Some course participants would admit frankly that a teacher certificate is something they have to get in order to stay in the profession. They would not regard the certificate as a kind of professional status. Teacher I remarked that studying the course "is helpful to [his] future in securing a job." Some teachers (E, D, and J) admitted that all they wanted was to "get a certificate for maintaining [their] jobs in school. "

Constraints Of Adult Life

All course participants were attending the course against adult life constraints. Again these constraints affected their approach to attend the in-service part-time programme. Some of their feedback were quoted as follows:

> *" Although untrained teachers, attending the course with three evenings per week is somewhat hard to bear. " (Teacher A) .*

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[3] The twelve subject teachers interviewed were coded as Teacher A to Teacher L.

> *"Some course units require broad and deep learning and cannot be learnt in a few lessons. The biggest problem is time constraint. Three evenings per week is too many. I live quite remote from the campus. I feel very tired...." (Teacher C)*
> *" I found some parts of the course quite useful, but I always feel very tired. The work in the day time is already exhausting. Therefore, it is not easy to concentrate in the course, I always fall asleep. " (Teacher I)*

Obviously, studying the course is not on the top of the agenda as far as the constraints of adult life is concerned:

> *"Studying the course is not my first priority. I won't spend time on my course work. I only spend time in my study when I have assignments or assessments to do." (Teacher A, B and K)*
>
> *" I have a busy life. In addition to be a full-time teacher, I have many part-time jobs (writer and journal reporter), in addition, I need to spend time on dating." (Teacher D)*
> *"For the sake of interest, studying is my best choice, but the school works have already occupied a lot of my time. It is not easy in time management." (Teacher E)*

These responses indicated that they would put extra effort only when they had assignments to do. Most of the time, they would do the minimum in their course. They all made it clear that "they would put effort on the course but not too much, just to avoid failing the course". Indeed, a majority of the class spend less than three hours a week on the course (6 hours short of the required study time proposed by the Institute).

Even if they can spare the time, it is difficult for most of them to adapt school life as students. Teacher B's remark is worth quoting in full: "I am not adapted [to the studying environment] at the beginning. I have been from this environment for over ten years. It takes time for me to adapt. The grade of my study in the course is not bad. It makes me feel that I am capable and want to do better. But it is difficult for me to adjust." Yet, not every participant is like Teacher B. Teacher C commented that "Each unit requires one assignment at least. It is too much for a full-time teacher." This is not very difficult to understand, for example, Teacher J's problem is that her "previous background was in "science" and not "arts".

Therefore, it is difficult for me to catch up Sociology (arts subject in nature) or topics alike.

Course Content

The devotion and involvement in studying a course also depends on how much gain one can obtain. Although most course participants came to the course without high expectation, considerable positive feedback on the course was obtained. To some extent, most course topics and materials motivated them to study positively:

> " ..., but some course units help with my teaching,.... These materials were not *in my mind before, but they inspired me that things could be achieved from different perspective." "My teaching became more systematic." (Teacher A) "The course tells me something I need to know." " I become*

> *objective in evaluating myself in lesson planning." "At least as a teacher, the course made me reflect." (Teacher D).*

Yet there are complaints about the curriculum. The design of the curriculum would lessen their motivation and enthusiasm in putting effort on their study:

> *" I am not interested in some units. For example, there is no need to spend study time in those practical skill sections (video production). (Teacher J) "Some of course content are out-dated, not really useful, just a waste of time, therefore can be deleted. " (Teacher L) "The course is not relevant and not practical." (Teacher F) "I have yet to see the relevance of the curriculum to my teaching. (Teacher J) I really can see very little usefulness I learn nothing. nothing. (Teacher G) .*

Summary Of The Findings

As a whole, the participants' beliefs and perception might be influential in directing their choice of approach for their inservice studies. The experience they had in attending the course might further strengthen the adopted approach and strategies towards their studies. This was reflected by the 'disapproval' of some of the units offered by the Institute. In addition, their instrumental attitude towards the profession was likely to generate the idea that teaching was a technical craft. Once you master the skill you would become a teacher. They would not bother to think that teaching was not simply learning teaching tricks but the development of oneself as professional as well as a commitment for self development and continuing education. (Louden, 1991). Time is another factor. No doubt, there were many other commitments competing with the limited time these adult learners had. However, the mentality of getting a pass and the teacher certificate, as revealed by the results and findings, was the most critical and decisive. One of the contributing factors of this mentality is that the subjects are reluctant teachers. They belong to the technical and commercial sectors. They are 'forced' to change jobs partly because of the socio-economic change in Hong Kong.

DISCUSSION AND SUGGESTION

The above findings suggest that the learners participating in the inservice teacher training course have various reasons in enrolling. However, the majority came to the course with a clear instrumental objective: to get a teacher certificate so that they can 'participate' in the teaching profession. There were other important reasons for their study: attending the course would finally lead to job security in the profession. As a means of changing jobs, they simply needed to take the in-service course. Although this is atypical to our understanding, this new finding offers a new perspective in discussing teacher recruitment in the time of uncertainty - the 1997 transition era.

All these various reasons are contributing factors to why all these teachers adopted the least productive strategy, namely the surface approach. Yet, it is difficult for a study like this to find out precisely why a particular approach was adopted unanimously in this particular group, nor is this the purpose of the present study. Further investigation or classroom observation needs to be done to substantiate the findings from the questionnaire and interview. One possible answer might well be that there is one underlying motive dictating their behaviour. That these practicing teachers are not prepared to be teachers in the first place. They are technical and commercial personnel

They were trained to work in the commercial and industrial sectors. These students were either Technical Institute or Polytechnic graduates. In other words, they were 'reluctant' teachers. With this underlying motive - reluctance - they attended the course.

This motive *governed* the learners' 'tactic' of attending the course. In addition, the reluctance may arise from the inadequate design of the curriculum. There is not much self-directed learning modules and opportunities for practical application of things learned for these practical inservic teachers. There may also be life 'realities' which govern the time and effort put on their learning tasks. The interaction of all these factors or difficulties project the picture that we get from the questionnaire and the interview.

IMPLICATIONS

Three major factors which have significant influence on the less keen learning approach were discovered. These factors include the constraints of inservice teachers as part-time adult learners, the attractiveness of the course and the socio-economic change in Hong Kong. In the light of these factors, we can draw some important implications for teacher educators in providing a better curriculum. The following diagram shows the impact of attitudes society and course on learners and the relationship between them will be explained in the following paragraphs.

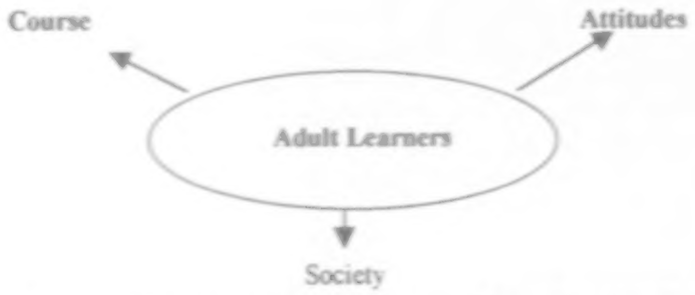

Diagram (1): Three Kinks of relationships under examination

First, when we look at the relationship between the learners and their learning attitudes, we will easily find that their learning style has been greatly governed by time limitations. They are typical adult learners who have commitments with their families and jobs. In order to pull learners to the course, modification of the present study mode is necessary. The present provision of course is a 'three-evening' class and inservice teachers coming to the class are always found exhausted by tedious school work during day time. So, three evenings may not be the best arrangement of attendance for in-service teachers and other modes of attendance should be adopted, for example, an evening-Saturday combined mode or full-day Saturday mode. Another way to alleviate their pressure from time is to integrate the assessment procedure in the learning process. The study mode could be extended to some kind of discussion or co-operative learning. Their involvement in the study process and performance and teacher educators are more productive than mere lecturing. This interaction may arouse interest and enhance better communication and understanding among course designers, trainers and learners. By means of dialogue, more room for sharing, active learning, appreciation and reflection can be catered for (Burbules, 1993). This is also an appropriate pedagogy for adult learners and teacher empowerment (Shor, 1992). Furthermore, teaching is more than a craft which requires knowledge, commitment and faculty. Enlarging teacher's knowledge base (Reynolds, 1989) and the examination of tacit knowledge (Schon, 1983, 1987) is essential for a better application of practical skills and tricks in the classroom as well as decision making.

Second, viewing the relationship between learners and the course, we learn that this group of inservice teachers have certain expectations on learning before joining the class. They are practicing teachers and they are eager to get something beneficial to their teaching when they attend the class. The attractiveness of the course will be weakened if their expectations are not satisfied. As secondary school teachers, they are in need of some practical skills such as techniques in dealing with pupils in everyday classrooms. A more balanced curriculum of skill and knowledge is needed. More opportunities should be granted to them to put theories into practice. Workshops should be encouraged to provide chances for them to try out what is learnt. Other meaningful tasks will be seminars and classroom observations. Bryant (1981) is right to state that adult learners require learning that is self-paced, self-directed, relevant to personal or career interests. Satisfying the learners' needs is the fundamental and essential requirement to increase the attractiveness of the course. Attracting learners' to the course is the first step to activate their motive in learning.

Following the initial attraction of learners to learning, teacher educators should adopt the growth approach for inservice training (Jackson, 1971). Inservice training should not be regarded as projects aimed at fixing some unprepared learners (Jackson, 1971; Orlich, 1989). Course participants have to be recognized as competent learners and can contribute greatly in the process of learning (Yager, et al., 1985).

Teacher educators are facilitators who provide better environment conducive to the exploration of knowledge and pursuit of expert skills (Stenhouse, 1975).

Practically speaking, novice teachers or teachers without initial professional training may find classroom teaching particularly stressful and demanding. It would be encouraging if some sort of concession, for example, a reduction of teaching load, is made to all teachers attending initial inservice training. Attending evening course with projects and assignments to finish while committed to full teaching load may scare many participants. The threatening experience may further reinforce the 'getting-a-pass' mentality or 'performing-the-minimum' attitude among learners.

Third, the factor about the social-economic change on adult learners in Hong Kong should be firmly noticed. Most manufacturing industries have retreated to Mainland China in the beginning of this decade. Many jobs demand employees to be working both in factories in Hong Kong and China. Some of these people want to find secure jobs like teaching and they are probably the major source of learners of inservice teacher training courses in the time of change-over in 1997. This has reflected the reality of the prominent un-motivated learning attitude of this group of in-service teachers at least when the research is undertaken. Students who come to the class are not interested in teaching in the very first instance. Instead, they are forced to come to the course because they have to take up teaching at a late age due to career change initiated by social-economic turbulence. In order to change this passive learning attitude of the learners, more should be done on re-structuring the course. This will include adding more interesting and practical content to the curriculum.

Participants who can apply what is learnt in everyday work will easily be convinced that the course is useful and practical.

The department and institute concerned should take every step to improve the situation notwithstanding the phenomenon may not persist after the transition era.

CONCLUSION

There are three main issues for teacher educators to pay attention to. First, a more positive attitude toward learning together with a more constructive approach should be introduced to practising teachers taking professional inservice courses. More induction courses should be planned to towards achieving this end. This kind of attitude could be nurtured through school-based staff development programmes and the enhancing of professionalism by local teachers' associations. Second, curriculum planners and teacher educators should be more sensitive teachers' needs and have to design more relevant and stimulating inservice courses for the heavily engaged and sometimes reluctant learners. It possible, trainers should have greater ownership of the training programme as well as closer link with a school's development with individual professional development (Bell, 1989). Third, more effort is needed in enhancing the status of teaching profession. Without a better understanding about teaching, it is difficult for educators to cultivate a positive attitude among the novice and the untrained teachers.

This study is of particular value to the researchers in that it has brought more insight to them about the learning motives and strategies of the learners they had been teaching, and why these learners adopted the surface approach when they were studying. The rough 'gestalt' offered information in reviewing, revising and re-examining the teacher training courses.

Researchers of the present study hope to have individual studies for each of the participants in the future and to look for the details of their specific and unique stories. More similar research can be carried out to enable comparative studies among different groups of inservice course participant. Finally, the results of the study is not meant to be a generalization to all adult inservice teacher learners. Although these learners adopt surface approach, the reasons leading to their choice differ in one way or another. It is to this extent that course providers have an ever-challenging job in fulfilling the needs of 'individual learners', especially in the time of the transition era

References

Bell, M. (1989). Is GRIST cost-effective to the LEA. In R. McBride (Ed.). The In-service Training of Teachers. London: The Falmer Press.

Biggs, J. B. (1987). Student Approaches to Learning. Hawthorn, Victoria: Australian Council for Educational Research.

Biggs, J. B. (1992). Why and How do Hong Kong Students Learn? [Education Paper 14] Hong Kong: Faculty of Education. University of Hong Kong.

Bogdan, R.C. and Biklen, S.K. (1992). Qualitative Research for Education (2nd Ed.). Boston, MA.: Allyn and Bacon.

Bryant, B.L. (1981). "A Review of the Literature in Selected Areas of Educational Research'. In T.E. Andrews, W.R. Houston, and B.L. Bryant. (Eds.). Adult Learners. Washington, D.C.: Association of Teacher Educators.

Burbules, N.C. (1993). Dialogue in Teaching. New York: Teachers College Press.

Daines, J., Daines, C. and Graham, B. (1994). Adult Learning Adult Teaching (3rd Ed.). The Alden Press: New York.

Dunkin, M.J. and Biddle, B. J. (1974). The Study of Teaching. New York: Holt, Rinehart and Winston

The Federation of Hong Kong Industries (1991). Hong Kong's Industrial Investment in the Pearl River Delta: Survey among Members of the Federation of Hong Kong Industries Hong Kong

Gibbon, M. and Norman, P. (1987) 'An Integrated Model for Sustained Staff Development' In M. F. Wideen and 1 Andrews (Eds.) Staff Development for School Improvement.

Havighurst, R. J. (1961) The Developmental Tasks and Education. New York: David McKay Co.

Hong Kong Government (1995) Hong Kong Social and Economic Trends. Hong Kong: Census and Statistics Department.

Hopkins, D. (1989) Identifying INSET Needs: A School Improvement Perspective. In McBride, R (Ed). The Inservice Training of Teachers. Falmer Press.

Houle, C.O (1961). The Inquiring Mind: A Study of Adults Who Continue to Learn. Madison: , University of Wisconsin Press.

Jackson, P.W. (1971). 'Old Dogs and New Tricks: Observation on the Continuing Education of Teachers'. In L. J. Rubin (Ed.). Improving In-service Education: Proposals and Procedures for Change. Boston: Allyn and Bacon.

Knowles, M. (1974). 'Issues in Adult Learning Psychology'. In M. Tight. (Ed.). Adult Learning and Education. London: Croom Helm.

Knowles, M. (1978). The Adult Learner: A Neglected Species. London: Gulf Pub.

Knowles, M. (1983). 'Andragogy: An Emerging Technology for Adult Learning.' In M. Tight (Ed.). Adult Learning and Education. London: Croom Helm.

Louden, W. (1991). Understanding Teaching. New York: Teachers College Press.

Mackie, K. (1981). The Application of Learning Theory to Adult Teaching. Nottingham: The Department of Adult Education.

Marton, F. and Saljo, R. (1976). On Qualitative Differences in Learning - I: Outcome and Process. British Journal of Educational Psychology, 46, 4-11.

McFann, H.H. (1972). 'The Instructional P'. In Klevins (Ed.). Materials and Methods in Adult Education. New York: Klevin Pub.

National Institute of Adult Education. (1970). Adequacy of provision. Adult Education, Vol. 42 (6).

Orlich, D.C. (1989). Enhancing Human Potential. Boston: Allyn Bacon.

Reynolds, M.C. (1989). Knowledge Base for the Beginning Teacher. New York: Pergamon Press.

Rogers, A. (1986). Teaching Adults. Milton Keynes: Open University Press.

Rogers, J. (1971). Adults Learning. Penguin Books.

Schon, D.A. (1983). The Reflective Practitioner: How Professionals Think in Action. New York: Basic Books.

Schon, D.A. (1987). Educating the Reflective Practitioner: Toward a New Design for Teaching and Learning in the Professions. San Francisco: Jossey-Bass.

Shor, I. (1992). Empowering Education. Chicago: Chicago University Press.

Sparks, D. and Loucks-Horsley, S. (1990). 'Models of Staff Development'. In W.R. Houston. (Ed.). Handbook of Research on Teacher Education. New York: Macmillan.

Stenhouse, L. (1975). An Introduction to Curriculum Research and Development. London: Heinemann.

Yager, R.E., Hidayat, E.M., and Penick, J.E. (1985). Features which Separate Least Effective from Most Effective Science Teachers. Iowa City: Science Education Center, University of Iowa.

STUDENT TEACHERS' VIEWS OF CONCEPT MAPPING AS A MEANS TO ENHANCE COLLABORATIVE LEARNING IN SCIENCE CLASSROOMS

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INTRODUCTION

In most developing countries teaching of science takes the form of direct transmission of knowledge from the teacher to the students through the direct lecture-question-answer mode of instruction. In this mode of science instruction, students engage in the lesson mostly by listening and watching the teacher perform and by answering teacher's questions. There is very little student-student interaction to help students initiate and use scientific discourse in the learning of science. Science classrooms have the potential to provide opportunities to help students develop deeper understanding of science concepts through student-student interactions. For example, school science laboratories provide opportunities for students to begin to make observations, collect data and discuss them in groups (Roth and Roychoudhury 1994, Kempa and Ayob 1991 1995). Kempa and Ayob (1995:753) made the following observations about group work in science laboratory.

> *"Apart from indicating a general satisfactory level of achievement from group work they also demonstrated a significant amount of 'learning from others' to have occurred in the sense of pupils including in their written answers points of knowledge and insight that had initially been contributed by other pupils to the group discussion. The conclusion to be drawn from this is that task-related comments and observations made by pupils in (the course of a group discussion represent a major shared (knowledge) resource from which the pupils can, and do, learn."*

In addition to school science laboratories Roth and Roychoudhury (1992, 1993) have identified collaborative concept mapping as another ideal tool for engaging students in extended science discourse. Concept mapping is a technique introduced by Novak and Gowin (1984) as a "schematic device for representing a set of concept meanings embedded in a framework of propositions." In establishing this format Novak drew extensively from Ausubel's idea of meaningful learning. In Ausubel's theory of learning the most effective learning is seen as resulting from the establishment of patterns of relationship among concepts one holds. This is in contrast to 'rote' learning which Ausubel describes as situations in which concepts are not embedded in obvious rich conceptual network but are left relatively isolated within the broad conceptual structure. Hence, in the Ausubelian view meaningful learning results only when a learner in a conscious manner ties new knowledge currently learned to relevant concepts or propositions he already possesses. From this perspective concept mapping is a learning tool that can perform the function of helping students to consciously and systematically establish the relationships between concepts learned and newly introduced knowledge.

962

A number of ways of producing concept maps are now reported in literature. Basically, in producing a concept map students are required to identify key concepts in a lesson, lecture or a chapter in a book and specify relationships among the concepts with appropriate link-words to form a network of propositions. Novak and Gowin (1984: p. 16) advocate a hierarchical arrangement of the concepts on the paper with the general, more inclusive concepts on the top, leading down to the more specific concepts and ending with specific examples of objects or events to illustrate the origin of the concept meaning. Stuart (1985) has proposed another approach to constructing concept maps. In his proposal the general or key concept is given the central position in the map with the other concepts radiating outwards from it. In this format the hierarchy of the concepts may be seen in concentric circles around the key concept at the centre of the map. The hierarchical structure proposed for a concept map is based on Ausubel's notion of "subsumption" as the process of knowledge growth and organization. However, Husen and Postletwaite (1994: 1029) are of the opinion that the hierarchically structured concept maps "seem more reasonable to justify on practical ground, rather than argue for a isomorphism between the structure of the map and the psychological structure of meaning." This view is expressed by them because recent interest in distributed memory organization has moved away from the simple hierarchical pattern of internal representation. In his work, Anderson (1990) describes cognitive models more as a network or tangle of concepts and links rather than an orderly structured hierarchy.

One of the main uses of concept mapping techniques has been to document changes in student understanding of relationships between concepts learned, as concept maps provide a form of representation of the student understanding embedded in their cognitive structure. Horton et. al. (1993) made bibliographic searches for studies related to concept mapping. Their search yielded 133 titles. A vast number of these researches involved secondary school science students. Using a number of criteria they selected 19 studies for a metaanalysis exercise. Their analysis revealed that

> *(concept mapping has generally positive effects on both student achievement and attitude in the 19 studies examined. Concept mapping raised individual student achievement in the average study by 0.46 standard deviation, or from the 50th to 68th percentile". (p: 105).*

In most of the settings in which concept mapping activities were used as a learning tool, students produced concept maps on their own. However, Okebukola and Jedede (1988) reported that students who collaboratively constructed concept maps showed more meaningful learning than those who engaged in this activity on their own. Roth and Roychoudhury (1992) investigated this further and reconceptualised the epistemological underpinning of concept mapping. Roth (1994) explains that while concept mapping was originally grounded in individual difference psychology, we recently developed a social constructivist view that accounts for learning during student-student or student teacher interaction." In this perspective concept mapping is viewed as a tool for social thinking that engages both students and teachers in science discourse for negotiating and establishing new knowledge and understanding in classrooms. Roth and Roychoudhury (1992:549-550) have expressed the following views on collaborative concept mapping.

> *"Concept mapping,.....is an excellent activity that allows students to engage in extended science discourse. In these discussions, students verbalize tacit knowledge, their own conceptions, and make them available to critique, inspection, discussion and personal reflection ………….In the process of construction, the emerging concept map becomes a tool of social thinking. It takes on characteristics of stretches in design engineering which serve both as interactive communication tool and as a individual thinking tool."*

In a recent study Roth (1994) examined views of 46 junior high school students taking a course in physics on concept mapping as a learning tool and on collaborative concept mapping activities. Overall, students held a positive view regarding concept mapping and the use of concept maps for "learning. As regards concept mapping as a collaborative learning activity most of the students expressed the view that collaborative concept mapping helped them to exchange, to explain, to elaborate and justify their views and arrive at negotiated meanings. They also expressed the view that this form of discourse provided a non-threatening atmosphere for them to express and exchange ideas. The results of this study seem to indicate that one group of stakeholders in educational practice, namely the students responds positively towards this mode of learning. What are the views of student teachers? This is the concern of the present study.

Reform in the teaching- learning environment in schools can be brought about only by equipping the teachers with a repertoire of pedagogical techniques and devices towards which the teachers have a positive view and attitude to motivate their use in the classroom situation. Quite often innovative ideas do not take root in the educational setting because the teachers are not convinced of the practicability and effectiveness of the ideas which are thrust on them. For them to be convinced, they have to be engaged in real life experiences with whatever ideas we want them to implement in the classroom. Colleges, institutes and faculties of education are ideal places to start this process of familiarizing our future teachers with innovative educational techniques and devices which research has shown will enhance the quality of learning. One such device which deserves the attention of science teacher educators seems to be concept mapping.

This study aims to find out the views of student teachers on concept mapping as a learning tool and as a means to enhance collaborative learning in science classrooms.

Questions that guided the inquiry were:

1. What are student teachers' views of concept mapping as a learning tool?
2. What are student teachers' views of concept mapping as a means to enhance-collaborative learning in science classrooms?

Answers to three additional questions were also sought.

3. Is there any difference between male and female student teachers' views with respect to questions 1 and 2 above?
4. Is there any difference between chemistry major and non-chemistry major student teachers' views with respect to questions I and 2 above?
5. Does difference in English ability influence student teachers' views with respect to question 1 and 2 above?

Methodology

Participants

Twenty five student teachers (8 males, 17 females) enrolled in the Bachelor of Science Education programme participated in the study. They were in the third year of a four-year degree programme. Thirteen of them are chemistry majors and the twelve others are chemistry minors. At the time of this study they were students in the Methods of Teaching Secondary Chemistry course taught by the author.

Instrumentation

A two part questionnaire consisting of 29 statements mainly selected from Roth's (1994) study was prepared for administration in this study. The statements were modified to fit the status of the participants who were student teachers. Part I consists of 12 statements related to concept mapping as a learning tool. Views were obtained with respect to four different constructs/dimensions, namely, i) concept map as a device to clarify and simplify conceptual links (4 items), ii) concept map as a device for making sense of information (3 items), iii) difficulties in concept mapping (3 items) and iv) use of concept maps in the future (2 items).

Part 2 consists of 17 statement related to the use of concept mapping as a collaborative activity in science learning. Views were obtained with respect to four different constructs/dimensions,namely, i) collaborative concept mapping as an occasion for peer-support learning (6 items), ii) collaborative concept mapping as a community of discourse (5 items), iii) collaborative concept mapping as an occasion for negotiating for meaning (4 items) and iv) classroom use of collaborative concept mapping (2 items).

The participants were required to indicate their level of agreement with each of the statements on a 5 point scale. This instrument was administered by the researcher at the end of the course. Information was also obtained about student teachers' views on concept mapping by requiring them to write a reflective journal on the use of concept mapping as a learning tool and on their experience in constructing concept maps as a collaborative activity with their peers.

Treatment

The Methods of Teaching Secondary Chemistry course began with six hours of training in the technique of constructing concept maps, in three two-hour sessions. In general the training in construction of concept maps followed the procedure set out by Novak and Gowin (1984: 32-34). After exposure to the procedure they were given training exercises. They were first provided with lists of concept words and required to construct maps linking the concept words with appropriate link words to form a network of propositions. Sample maps were shown for them to compare and discuss the differences between the model maps and their own. They were then given selected passages from chemistry textbooks. They were required to select their own set of key concepts, order them and construct maps.

When the student teachers were quite conversant and comfortable in the production of concept maps they were required to collaboratively construct concept maps for each of the lectures that were delivered in the course. As the first topic in the course " Nature of Science and Scientific Knowledge" was delivered, the researcher simultaneously listed the key ideas and attempted to develop a concept map on the white board. *This* exemplar acted as a model for the student teachers and also helped to clarify what was expected of them. The class was instructed to do the task in groups of threes or fours.

They were allowed to form their own groups. In all, each group of students produced 10 concept maps.

Data Analysis

The data collected through the questionnaire was analyzed using the SPSS:PC Window System.

Descriptive statistics and t-test analyses were used to answer the research questions. Where mean score comparisons of sub-groups were made, the level of acceptance was set at the 5 percent level.

The student responses to the questionnaire provided an indication of the degree to which certain views on concept mapping as a learning tool and as a collaborative learning activity can be taken as being shared by the student teachers whilst the 25 reflective journals of the student teachers gave supporting evidence for the views expressed through the questionnaire.

Results

The views of student teachers on concept mapping as a learning tool and the use of concept mapping as a means for collaborative learning activity were obtained using a questionnaire and a self report journal by the participants in this study. The results are reported below.

Concept Mapping as a Learning Tool

Views on this aspect of concept mapping were obtained by 12 items in the questionnaire and through self-report journals. The 12 items in the questionnaire obtained views on four aspects of concept mapping, namely, concept maps as devices to clarify and simplify conceptual links, concept mapping as a device to make sense of information, difficulties in constructing concept maps and future use of concept maps in teaching. The views of the participants are reported in Table 1.

Clarifying and Simplifying

Overall student teachers hold positive views regarding concept mapping as a learning tool. More than 80 percent of the participants agree or strongly agree that concept mapping can be a device to clarify and simplify conceptual links. Rosin, Chean, Juna and Zamly wrote in their journal as follows:

> *"With concept map I realize that I can summarize a day's lesson and make a simplified view of the whole topic which has been taught. In this way key ideas can be easily seen and laid out on one page." Rosin "Concept map helps me summarize key concepts or ideas of each lesson and it helps me to revise more effectively and efficiently. Furthermore, it helps me to identify how one idea/concept is linked to another idea/concept." Chean" Concept mapping makes me understand more about what we are learning during lectures. I can see the exact pattern of the topic that we have done. I can also understand the ideas much better than without doing a concept map." Juna "Concept map fulfills two important aspects that I always wanted when doing my revision or reading. It is simple, short and straight to the point and yet helps in enhancing learning and understanding ideas much easier." Zamly*

Table (1)

Concept Mapping as a learning Tool: Level of Agreement (N = 25)

Statement	SD No. (%)	D No. (%)	N No. (%)	A No. (%)	SA No. (%)	Mean Max. 5
Clarifying and Simplifying 1. Concept mapping helps me to clarify the relationship between concepts.			3 (12.0)	15 (60.0)	7 (28.0)	4.16
2. Because the concept map lays out the concepts in a visual way, it helps me understanding the ideas much better.			3 (12.0)	18 (72.0)	4 (16.0)	4.04
3. By concept mapping, I can express complicated idea in a simple form.			4 (16.0)	14 (56.0)	7 (28.0)	4.12
4. Concept mapping helps in clarifying complicated and confusing ideas.			5 (20.0)	16 (64.0)	4 (16.0)	3.96
Making Sense of Information 5. Concept mapping helps to make sense of the many items in a lecture and organize them in a meaningful whole.			2 (8.0)	22 (88.0)	1 (4.0)	3.96
6. Cross-links help me to see the bigger picture of a topic.		2 (8.0)	2 (8.0)	19 (76.0)	2 (8.0)	3.84
7. Concept mapping is a good way of reviewing a lecture/chapter in a book.		1 (4.0)	1 (4.0)	15 (60.0)	8 (32.0)	4.20
Difficulties in Concept Mapping 8. The most difficult thing in concept mapping is to order the concepts in an appropriate hierarchy.		3 (12.0)	2 (8.0)	12 (48.0)	8 (32.0)	4.00
9. The most difficult thing in concept mapping is to find appropriate link words to make propositions.	2 (8.0)	4 (16.0)	1 (4.0)	11 (44.0)	7 (28.0)	3.68
10. The most difficult thing in concept mapping is to find appropriate cross-links.	1 (4.0)	3 (8.0)	1 (4.0)	15 (60.0)	6 (24.0)	3.92
Future Use of Concept Mapping 11. Concept map is a good learning tool to be introduced to students in school.		1 (4.0)	7 (28.0)	12 (48.0)	5 (20.0)	3.82
12. I will definitely introduce concept mapping to all my students when I start teaching in school.		1 (4.0)	9 (36.0)	12 (48.0)	3 (12.0)	3.68

SD = strongly disagree(l) D = disagree(2) N = neutral(3) A = agree(4) SA = strongly agree(5)

Making Sense

Similarly more than 84 percent of the participants agree or strongly agree that concept mapping helps to make sense of information presented in lectures or in text materials. This view is also expressed by Ros, Mari and Zamly in their respective journals.

> *" I think concept mapping helps us to clarify the relationship between concepts and it also expresses complicated ideas in a simple form. Concept map serves as a brief outline of a particular lesson consisting of all the relevant ideas and key points. For me concept map helps me to see the bigger picture of the topic I learn/study." Ros*
>
> *"Concept map helps me summarize a day's lesson and gives a simplified view of the whole topic which is being taught. This means that key ideas can be clearly seen and laid out in one page so this will save time for me to search for the main ideas or any part of it, rather than through the whole text.*
> *"Concept map provides me ideas as how to link a concept to another using suitable link words. Concept mapping is done in the form of diagrams and this is more attractive and can give me motivation to look at it and read it. In contrast I always get bored when reading wordy notes." Zamly*

Difficulties

However, more than 70 percent of the participants are of the view that concept mapping is not a easy technique. They seem to have difficulty in ordering concepts in an appropriate hierarchy, and finding appropriate link words and cross-links. This suggests that more training needs to be given before students are engaged in concept mapping activities. This view may also be due to English language being the second language of the participants, whose proficiency in the language is rather low. In their personal journals Louis, Nora and Keng have expressed the difficulties they encountered in the following manner.

> *"The difficulty I have with drawing concept maps is how to arrange the concepts hierarchically and Choosing the right link word between the concepts." Louis*
>
> *"When doing concept map on my own I have some difficulty in finding the correct link word." Nora*
>
> *" Concept maps can become very complicated especially when concepts start to inter- relate too frequently between different hierarchies in a concept map. At times the process of classifying concepts into hierarchies is often difficult and quite subjective." Keng*

Future use in school

Views with respect to the future use of concept mapping in their teaching indicate that only about 68 percent of the participants consider concept mapping as a good learning tool to be introduced to students in schools. The item " I will definitely introduce concept mapping to all my students when I start teaching in school" received only 60 percent agree or strongly agree responses while another 36 percent were uncertain. Hayat, and Kim have expressed their views of using concept mapping in schools as follows, in their journals.

> *"Concept mapping is essential to be introduced in the secondary schools because it can help students to understand the learning materials more easily by this process. Concept map can also help them to retain longer what they have learned." Hayat*

> *"Generally, students (in Brunei Darussalam) are weak in English Language hence I feel that it will be more beneficial to students to use concept mapping technique as a summary of a lesson as it is easier to understand concepts and simple principles drawn in a concept map." Kim*

Concept map vs student teachers ' characteristics

To find out whether any relationship exists between the views expressed regarding concept mapping as a learning tool and the characteristics of the student teachers in terms of their major, gender and English language proficiency the participants were divided into two sub-group on each of the variables and the mean scores of sub-groups were compared using t-test analyses The results of the analyses are reported in Table 2. below.

Table (2)
Results of t-test analyses

Construct	Variable	Group	Mean (Sd)	t-Value	2-tail Sign.
clarify and simplify	major	chemistry non-chemistry	16.92(1.50) 15.58(1.56)	2.19	.04
	gender	male female	16.12(2.59) 16.35(1.06)	.75	ns
	English prof.	weak good	16.38(1.89) 16.17(1.40)	.74	ns
making sense	major	chemistry non-chemistry	11.92(1.76) 12.08(0.79)	-.30	ns
	gender	male female	12.25(1.03) 11.88(1.45)	.53	ns
	English prof.	weak good	12.08(1.38) 11.92(1.31)	.77	ns
difficulties	major	chemistry non-chemistry	11.23(2.77) 12.00(1.65)	-.83	ns
	gender	male female	11.62(2.07) 11.59(2.45)	.97	ns
	English prof.	weak good	11.46(1.98) 11.75(2.67)	-.31	ns
school use	major	chemistry non-chemistry	15.92(2.14) 14.92(1.56)	1.33	ns
	gender	male female	15.75(2.56) 15.29(1.61)	.59	ns
	English prof.	weak good	15.69(2.06) 15.17(1.80)	.50	ns

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Only with respect to one variable, the major subject of the student teachers was there a significant difference regarding views of concept map as a device to clarify and simplify conceptual links. Participants majoring in chemistry showed stronger agreement than the non-major chemistry participants with this aspect of concept map. The difference was significant at the set 5 percent level. Most of the non-major chemistry participants were majors in mathematics. Perhaps, conceptual links do not play a major role in mathematics education per se or they are not identified as useful learning tools by mathematics student teachers.

Concept mapping as a collaborative activity

Views on this aspect of concept mapping were obtained through participants' responses to a questionnaire and through self-report of the participants about their experiences in collaborative concept mapping. The results of the responses are shown in Table 3.

Table (3)
Collaborative Concept Mapping

Statement	SD No. (%)	D No. (%)	N No. (%)	A No. (%)	SA No. (%)	Mean Max. 5
Peer Support 1.Concept mapping with my peers gives me confidence in the subject.			9 (36.0)	13 (52.0)	3 (12.0)	3.76
2. When we do group concept mapping, many of my doublets, questions and a lot of confusion are resolved.			3 (12.0)	20 (80.0)	2 (8.0)	3.96
3. By making concept map as a group, we learned a lot from one another.			2 (8.0)	14 (56.0)	9 (36.0)	4.28
4. Concept mapping helps us in collaboratively making see of the material in a lecturer.			3 (12.0)	15 (60.0)	7 (28.0)	4.16
5. When I teach someone else in the group, it helps me to gain confidence in my own knowledge.			4 (16.0)	13 (52.0)	8 (32.0)	4.16
6. During concept mapping my peers are important knowledge resource.	1 (4.0)		5 (20.0)	11 (44.0)	8 (32.0)	4.00
Community of discourse 7. When I justify my ideas during concept mapping review how I understand them and thus I learn by rethinking what I already know.			1 (4.0)	16 (64.0)	8 (32.0)	4.28

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Statement	SD No. (%)	D No. (%)	N No. (%)	A No. (%)	SA No. (%)	Mean
8. Sometimes when I try to justify my ideas during concept mapping, I find out that I didn't understand a concept completely.		3 (12.0)	5 (20.0)	15 (60.0)	2 (8.0)	3.64
9. I learn by trying to find loopholes in the justification of my peers..		1 (4.0)	11 (44.0)	11 (44.0)	2 (8.0)	3.56
10. When someone explains his/her ideas during concept mapping, it helps me to learn something that I didn't know or that I understood in a different way.		1 (4.0)	1 (4.0)	15 (60.0)	8 (32.0)	4.20
11. Elaboration during concept mapping puts meaning into terms that my peers can understand.		1 (4.0)	2 (8.0)	16 (64.0)	6 (24.0)	4.08
Negotiating meaning 12. Concept mapping allows a group to negotiate the meaning of concepts and ideas.				19 (76.0)	6 (24.0)	4.24
13. Disagreements are important in learning. They lead to debate and introduce new material that has to be justified. Which lead to new learning.			2 (8.0)	10 (40.0)	13 (52.0)	4.44
14. If a peer says something that I am not sure about or disagree with, that is the time either to learn from my peers or correct their errors.			1 (4.0)	14 (56.0)	10 (44.0)	4.36
15. The group concept mapping engages me in talking science and testing my own understanding.			2 (8.0)	14 (56.0)	9 (36.0)	4.28
Future use in school 16. Collaborative concept mapping can be a fruitful activity in science learning.			4 (16.0)	12 (48.0)	9 (36.0)	4.20
17. I will definitely use collaborative concept mapping activity in my teaching.			13 52.0	9 36.0	3 12.0	3.60

SD = strongly disagree(l), D = disagree(2) N = neutral(3), A = agree(4), SA = strongly agree(5).

Peer Support

There was very little disagreement with the statements related to this construct. Between 8 to 36 percent were neutral and between 64 to 96 percent agreed or strongly agreed with statements that peer support contributed positively to group members' learning during collaborative concept mapping. This view is strongly supported by the personal journals of the participants. Juna, Keng, Nora and Hayat expressed their views as follows in their respective journals.

> *"By doing concept mapping in group I can discuss with some of my friends and understand more of what we learned about the topic. Group discussion is very effective way of learning as I get opinion from my friends about things I don't know. If I am confused, my Friends help me and guide me to resolve my confusion." Juna*
>
> *"I prefer to work in group when constructing concept maps because peer learning and teaching takes place. In most cases, while constructing concept maps on the lecture notes of this course, my peers and I have exchanged personal interpretation of notes. This significantly helped us to build a better understanding of the notes as well as a better concept map." Keng*
>
> *"I like doing concept maps as a group. I can discuss with others and share ideas with them. My concept maps are based on what I have understood, so any misconception that I may have can be clarified with justification by my friends." Nora*
>
> *"Though arguments arise during the course of discussion it makes learning more mentally effective. If I am less confident in my understanding I have the opportunity to gain more required information from my peers." Hayat*

Community of Discourse

Similarly as with the first construct very few of the student teachers disagreed with the statements related to this construct. Most of the participants realized that collaborative concept mapping provided opportunities to engage in discourse. They have expressed that the justifying, explaining and elaborating activity, in collaborative concept mapping were very beneficial Richard. Ros and Nora have expressed their impression in their respective journals as follows;

> *"In my experience, during a group discussion, you can't get away without arguing with your friends about the topic concerned. From this I listened to the criticism of my ideas. From this I understood where my mistakes were and learned something from my friends about their views. Mistakes can be pointed out and most definitely I learned from my mistakes." Richard*
>
> *"Concept mapping in group engaged me in talking about science education and testing my own understanding, share ideas and learn how to make concept maps nicely, help me to learn something that I didn't know or that I understood in a different way." Ros*

972

> *"In group there are more heads thinking about the same concept. There is bound to be some clashes of ideas and arguments because each person has his or her own way of understanding. The discussions that follow, not only allow each member to voice his or her opinions but also teach us to interact and communicate with each other." Nora*

Negotiating Meaning

There was a strong endorsement of collaborative concept mapping activity as a context for negotiating for meaning of concepts and ideas. All items in this construct received more then 90 percent agree and strongly agree responses. Views expressed in the journals also supported this feelings. Especially the journals of Loo, Eddy and Fong brought out this aspect of collaborative concept mapping quite saliently.

> *"Group work improves my learning skills since it permits me to choose and make decision. In other words it involved everyone in the learning process and led each one of us to invent for ourselves the concepts that we were investigating." Loo*

> *"Concept maps produced by a group has more connections or principles which results in a better concept map quality. Not only that in a group I learned to argue, analyze and transform difficult concepts into simple and understandable ones." Eddy*

> *"Concept links can be interpreted differently by different students. Working in a group provides students the opportunity to discuss, criticize, dictate their interpretation and eventually compromise on a precise interpretation of the concept." Fong*

Future use in schools

More than 80 percent of the participants agree or strongly agree that collaborative concept mapping can be a fruitful activity in science learning. But to the statement "I will definitely use collaborative concept mapping activity in my teaching" only about 50 percent of the participants agreed or strongly agreed to the statement. Nobody disagreed with the statement but nearly 50 percent have some reservation. Keng and Ros wrote positively about the use of collaborative mapping in schools while Chiung had some reservation about its use without taking into consideration the context.

> *"I personally think that most people will be able to master this technique with just enough practice. Therefore, I hope to introduce this study skill to my future students to help them achieve a better academic performance through group activity .Keng*

> *"In the future when I teach in secondary school I will introduce this concept to my future students. The reasons are, it is not only simple but also worthwhile and in fact an effective way of summarizing and remembering things that are important especially when done in group." Ros*

> *'Concept mapping activity is only good and effective under certain circumstances. If I become a teacher in the future, I must study the nature of students, the culture of school, subject concerned and time allocation. Only when seeing all of these are suitable enough for concept mapping in learning and teaching approach, I will introduce it in my class." Chiung*

Two general remarks were made by a good number of student teachers in their journal. Most of them expressed the view that collaborative concept mapping was less time consuming, resulted in better quality concept maps, and involved them in serious discourse about the subject matter of the content of the course. However, a number of them remarked that some of their peers took advantage of the situation by not contributing much to the discussion but benefited from the final product of the discussion at the expense of those who prepared and engaged in the discussion.

Collaborative Concept Mapping vs Characteristics of Student Teachers

To determine whether a relationship exists between the views expressed about collaborative concept mapping activity and the characteristics of student teachers in term of their major subject, gender and English proficiency, they were divided into sub-groups on each of the variables and the mean scores of the sub-groups were compared using t-test analyses. The results of the analyses arc shown in Table 4.

Table (4)
Results of t-test analyses

Construct	Variable	Group	Mean (SD)	t-Value	2-tail Sign.
Peer support	major	chemistry non-chemistry	24.85(2.41) 23.75(2.14)	1.20	NS
	gender	male female	24.75(3.01) 24.12(1.96)	.63	NS
	English prof.	weak good	24.23(2.92) 24.42(1.51)	-.20	NS
Community Of discourse	major	chemistry non-chemistry	20.54(2.11) 18.92(1,78)	2.07	.05
	gender	male female	19.75(2.12) 19.64(2.14)	-.02	NS
	English prof.	weak good	19.23(2.17) 20.33(1.92)	-1.34	NS
Negotiating Meaning	major	chemistry non-chemistry	17.77(1.59) 16.83(1.34)	1.69	NS
	gender	male female	17.75(1.49) 17.12(1.54)	.97	NS
	English prof.	weak good	17.23(1.24) 17.42(1.3)	-.30	NS
School use	major	chemistry non-chemistry	8.15(1.34) 7.42(0.90)	1.60	NS
	gender	male female	8.12(1.25) 7.65(1.17)	.93	NS
	English prof.	weak good	8.31(0.95) 7.25(1.21)	2.44	.02

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With respect to two variables, significant differences were found between the sub-groups. Student teachers majoring in chemistry have expressed stronger support for the view that collaborative concept mapping provides a community for discourse than student teachers not majoring in chemistry. The difference is significant at the 5 percent level. Student teachers more proficient in English expressed a greater desire to use collaborative concept mapping in their teaching than lower English-proficient student teachers. The difference is significant at the 5 percent level.

CONCLUSION

This study sought the views of student teachers on concept mapping as a learning tool and on collaborative concept mapping as an activity to enhance learning. Analysis of the data sources revealed that in general student teachers through their engagement in concept mapping activities during the course did find that concept maps can be devices to clarify and simplify conceptual links and make meaning of lectures and text materials. However, they still find the construction of concept maps on their own to be somewhat difficult. They seem to have difficulty in ordering concepts in hierarchies and finding appropriate link works and cross-links in mapping. This may be related to the low English proficiency of the participants in the study. Twelve of the 25 participants had only a pass grade in the 16+ school leaving General Certificate Examination. There is a need for more coaching and feedback on students' work to enable them to master the technique of concept mapping.

With respect to the idea of introducing concept mapping to their future students in schools only 60 percent of the student teachers agreed that they would definitely introduce concept mapping to their students, 36 percent were non-committal and one disagreed. This hesitation on the part of 40 percent of the participants may be due to the difficulty that they experienced during this initial stage of their attempt at mastering the techniques. More time ought to be given to enable the student teachers to master the process of concept mapping.

Analysis of data sources revealed more favourable attitudes towards collaborative concept mapping activity. During the course of this study the participants were required to produce concept maps collaboratively in groups of threes or fours for each of the lectures delivered in the Methods of Teaching Secondary Chemistry course. The student teachers have expressed the view that collaborative concept mapping has enabled them to learn a lot from each other, made the task easier and less time consuming and helped them to produce comprehensive concept maps of the content of the course.

Student teachers found collaborative concept mapping as a means to create a community for discourse concerning the academic content of the course. They found the opportunity to justify, explain and elaborate their points of view very beneficial in their learning process. They also found collaborative concept mapping activities to be an opportunity to negotiate for meaning of concepts and ideas they hold and thus get a clearer understanding of the content of the course.

When it came to the question of implementing collaborative concept mapping activity in schools 84 percent of the student teachers agreed or strongly agreed that it can be a fruitful experience in science learning. However, to the statement "I will definitely use collaborative concept mapping activity in my teaching" though none of the student teachers disagreed with the statement only 48 percent were committed to the use of collaborative concept mapping activity in their teaching. The remaining 52 percent student teachers were non-committal.

A good number of student teachers were of the view that collaborative concept mapping might lead to a situation where some students would depend on others to do their work. They have experienced this in their group activity. Some have expressed the view that independent learners would not like this mode of learning Hence, there is a need for some caution in the use of collaborative concept mapping activities. The activity must be monitored so that all participants contribute to the discussion and benefit from it.

In conclusion it can be said that in general student teachers do have positive views of concept mapping and of collaborative concept mapping activities. Roth and Roychoudhury (1992) found the students in schools to hold similar positive views of concept mapping activities. Thus, there is strong research evidence to show that both the would-be teachers and learners favour the use of concept mapping strategies to improve learning. Hence some attention ought to be given to this learning tool as it provides a medium to engage students in academic discourse when concept mapping is done collaboratively. This study also supports the postulate that exposure to real experiences in teacher education can bring about positive views and an inclination to use innovative ideas and techniques in future teaching by would-be teachers.

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References

Anderson, J. R. (1990). *Cognitive psychology and its implications,* 3rd. edn. New York: W H Freeman.

Horton, P. B., McConney, A.A., Gallo, M., Woods, A. L., Senn, G.J., & Hamelin, D. (1993). An investigation of the effectiveness of concept mapping as an instructional tool. *Science Education,* 77, 95-111.

Husen, T. & Postlethwaite, N. (eds.). (1994). *International Encyclopedia of Education. (Vol.. 2) . New* York: Pergamon Press. 1026- 1031.

Kempa, R. F. & Ayob, A. (1991). Learning interaction in group work in science. *International Journal of Science Education. 13,* 341-354.

Kempa, R.F. & Ayob, A. (1995). Learning from group work in science. *International Journal of Science Education, 17,* 743-754.

Novak, J. D. & Gowin, D. B. (1984). *Learning how to learn.* Cambridge: Cambridge University Press.

Okebukola, P. A., & Jegede, O. J. (1988). Cognitive preference and learning mode as determinants of meaningful learning through concept mapping. *Science Education,* 72, 489-500.

Roth, W.-M. (1994). Student views of collaborative concept mapping: A emancipatory research project. *Science Education, 78, 1-34.*

Roth W-M & Roychoudhury, A (1992) The social construction of scientific concepts or the concept map as conscription tool device and tool for social thinking in high school science Science *Education, 76, 531*-557.

Roth, W.-M., & Roychoudhury, A. (1993). The concept map as a tool for the collaborative construction of knowledge: A microanalysis of high school physics students. *Journal of Research in Science Teaching,* 30, 503-534.

Roth, W.-M., & Roychoudhury, A. (1994). Science discourse through collaborativconcept mapping: A new perspective for the science teacher. *International Journal for Science Education, 16,* 437-455.

CULTURE BIAS AND INSENSITIVITY: WHAT ROLE DOES IT PLAY IN CROSS-CULTURAL TEACHING?

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In a recent conversation with a student of mine the following conversation took place, "Dr. Lyon, I knew the answer to the question you asked in class last." "Why didn't 'you speak up and give the answer in class?" "I keep quiet in the classroom, I'm Chinese and want to be a good student". These words are not verbatim but the essence of the conversation is recorded fairly accurately since I was working; on this paper and was so struck by the fact that the essence of my ideas were captured in this seemingly innocuous exchange. It rather succinctly summed up the differences between a mature Hong Kong Chinese woman and an American lecturer. Her behavior was at variance with what the lecturer expected of his students.

A few days after this conversation, a colleague from Australia was speaking, about her first year in Hong Kong She was lamenting the fact that her expectations for her students' behavior in class were not being realized. Further, she was disturbed that her style of teaching had not been well received by her students. She indicated that she discovered later that using terms like pedagogical knowledge assigning readings based on Western philosophy and practices and emphasizing pedagogical practices that were not familiar to them presented almost insurmountable difficulties for her students. She was also upset that she was unaware of these problems and that the student instead of confronting her tried to overcome these hurdles on their own with varying degrees of success. Because of these factors the lecturer initial perception was that her students were not interested or even worse not capable of doing the level of work that she expected of them. On reflection. she came to realize that these assumptions regarding, the students were unfounded and Jar from the truth.

These two examples serve to illustrate the problems of teaching in a cross-cultural setting. It is quite obvious that two different set of values and beliefs were operating simultaneously without any clearly established mechanism to bridge the gap. This resulted in impressions being formed that were not consonant with reality. The student knew the answer; the other students were working diligently. The misperceptions, however, could easily serve to reinforce already existing bias and stereotypes. Of course, one could contribute the differences to cultural heritage and feel as if a profound observation had been made. Is this good enough? Does it even begin to address the fact that bias and insensitivity can easily arise in classes where students and lecturers come from different cultural backgrounds. Although the focus of this paper will be on the problem of westerners teaching in an Asian country (keeping in mind that Asian countries differ profoundly, as do western countries), parallels can easily be made to any environment in which students and lecturers have different cultural backgrounds and heritage.

In reviewing the literature relating to the problems of cross-cultural teaching and learning. One must acknowledge the centrality of the problem inherent in classrooms where the learner is essentially being asked to assimilate e lecture in a foreign language.

The lecturer must also be aware of this and constantly search for appropriate words. Bickley (1989) provides a good synopsis of the problems faced by students and teachers alike. It is clearly obvious that this problem transcend mere conversation and knowledge and incorporates culture. pedagogy. curriculum. and learning. Gilbert (1989) in a study of learning styles in Mandarin/English classrooms indicates that "the data clearly show that learning styles are often culture and language specific" (p.230). In discussing English language teaching, it] Hong Kong. Glenwright (1996) states. "Culture. of course. is not the only factor contributing to the difficulties. As indicated. linguistic and pedagogical competencies are not unimportant" (p.11). Ellis (1996). in discussing, Western style teaching in Vietnam, indicates that the role expectations of the western teacher as " model of the language representative and interpreter of this culture, learner facilitator, friend, and counselor" (p. 6) may not be able to transferred across cultures. obviously such role conflicts and the inability to fulfill personal expectations is troublesome.

Vygotsky (1979) indicated that the individual and the social context are mutually constructive of a single interacting system, and cognitive development in a process of acquiring culture. Basically communication is, therefore the process by which a message is conveyed between a sender and receiver in a reciprocal manner that includes a deep cultural meaning. Transporting his theory into a bicultural setting -- such as Hong Kong's -raises any qquestions and also raises the stakes in getting the answer right. This meaning is often unrecognized by a non-native participant in the communication paradigm. The implication of this is evident. The student as well as the lecturer in the classroom conducted in a foreign language may both be unsuccessful communicators because of this unfamiliarity with the cultural loading of the communication. It may be that the nodding of tile heads of students in a Hong Kong classroom may not be an affirmation of understanding or agreement but rather a message of politeness or confusion. Does a smile in the a classroom in America mean the same as in China? It is very difficult to answer that question since it may indicate joy embarrassment or be face saving. Unless one is aware of these cultural factors much misunderstanding can occur.

It is interesting to note that much of the focus has been on the student and the problems that the student has in learning the foreign language. For the purposes of our discussion we are referring to English as the foreign language and the students would be predominately of Chinese heritage. Owens (1989) addresses the issue and points out in his work how little is really focused on teacher problems as opposed to learner or learning problems. It is axiomatic therefore that teaching and learning in a foreign language present many problems both cultural and pedagogical. Unless such problems are recognized effective classroom, interaction cannot take place. It is probable that under such conditions that preconceived ideas and beliefs may be confirmed. If these beliefs are erroneous bias would certainly occur.

The problems presented by language differences are exacerbated when perceived learner characteristics. teaching style and philosophy are considered. There is a great deal of literature that deals with the way in which Asians learn. It should be recognized that generalizations will be used in the following discussion and that the author is fully aware that such generalizations may be misinterpreted. Generalizations do weaken arguments but in this particular discussion the usefulness of generalizations outweigh the negative aspects: the reader should bear this caution in mind.

The image of Asian students in America and much of the Western world is that of an unimaginative industrious compliant rote-learner. How much of this is due to cultural heritage and tradition and how much is due to misconceptions regarding form and style of learning is an unresolved issue. In fact, much of the characterization of the Asian learner may really be the product of Western belief without full awareness of the cultural factors behind the Asian approach to and conception of learning and pedagogy.

Cheng (1995) discusses the concept of culture of East Asia. He describes East Asian communities "...as a family with cultural similarities with cultural similarities when compared with the rest of the world. The family includes Japan Hong Kong, South Korea, Taiwan, mainland China and Singapore as it basic members with the potential of including Vietnam and North Korea. The cultural study of education in this family may be pertinent to for example two other areas of stud>; education in southeast Asian societies where ethnic Chinese have high visibility; or learning characteristics of students with East Asian origin in Western societies" (p.89). He makes several assertions on as a result of his research and experience regarding education in these communities:

(a) Traditional East Asian societies . in one way or another. are viewed by its members as hierarchies in which each individual has a position.

(b) Such hierarchies are nevertheless dynamic, allowing for social mobility for which education is the sole legitimate means.

(c) In such societies. individuals are expected to adapt themselves as much as possible to the system, often by was of participation in competition.

(d) Education in these societies has evolved into a machinery for training, people's adaptability rather than for knowledge and practical life-skills.
From these I may further derive the following:

(e) In these societies. to be hard-working is not only a result but also the aim of education, which necessarily plays down the role of genetic ability.

(f) The relevant comfort with an irrelevant and uniform curriculum is a natural (although not necessary) consequence of the education construct (i.e. . for university entrance).

(g) The 'excellence' exhibited by East Asian students in international comparisons is a result of their preparedness to conform to uniform requirements and their belief in effort.

(h) Compared with the West the East Asian values of education is more compatible with the mass-production characteristics of contemporary education systems. In other words if East Asian students "achieve" it is because they are more "friendly" to the examination ideologies. (pp. 94-95).

These assertions provide a rather sweeping overview of the purpose of education.

Watkins and Biggs (1996) provide interesting insights into the Chinese learner and raise many and Style of their learning The work of Stevenson and Stigler (1992) Watkins (1996) Wang and Cheng (1995) and others clearly shows that the stereotypical picture of the questions regarding some of the myths attributed to the manner scope Chinese learner is merely that a stereotype based generally on lack of hard information. inappropriate analysis (e.g. using Western philosophy as base) and in many cases little significant contact or interaction with Asian students it should be noted that many

Westerners bring these stereotypes with them and often have them confirmed at least in their own minds when they discover that the Chinese student does not readily embrace the material curriculum and the methods of teaching employed in the classroom. The author must admit that this was his initial experience and that it tool; quite a while to realize this and to try to counteract this tendency.

Do the Chines approach learning and schooling different from Westerners? There is little doubt that there are differences and that the differences are significant and must be understood and addressed if cross-cultural teaching is to be effective. Lee (1996) presents the Confucian perspective on the perfectibility of humans their educability the role of effort and will power in learning while pointing out the social and personal role of education. The Confucian tradition puts great emphasis on personal initiative social responsibility and respect for teachers. There is the underlying belief that everyone is educable. that effort is a much more important factor than natural ability and that attaining success through education brings honor to the family and prepares one to assume a leadership role in society (e.g. Lee 1996) : Stevenson and Stigler. 1992, Cheng 1995 and Watkins and Biggs 1996.)

Students in Asian classrooms tend to be compliant. respect the teacher and not question authority. This does not necessarily mean that they are unimaginative closed minded nor lacking in initiative. It may well be that observations made by Western researchers using Western criteria may be inadequate in identifying classroom procedure and behaviors that lead to questioning. foster creativity and encourage initiative. Stevenson and Stigler (1992) indicate that the Asian classroom is replete with procedures and techniques that encourage creativity and questioning but not necessarily in a format that would be readily apparent to a Western observer or researcher.

Given the above considerations and the assertions put forth by Cheng (1995) and considering Biggs' (1996) concept of the Chinese learner. Tang's perceptions regarding collaborative learning Stevenson and Stigler's (1992) on Asian students' achievement, Lee's (1996) work on cultural context. and the other work cited above. It is evident that many of the myths held regarding the Asian learner have little basis in reality. It is also certain that to be a successful teacher in an Asian classroom requires a familiarity with and understandings of these concepts. In many cases Westerners do not possess this understanding or familiarity nor are there many examples in the literature of programs designed to address this need. The lament of my colleague recorded above as well as my own experiences clearly illustrate this short coming

Many Westerners bring to the study of the Asian classroom a perspective on teaching and learning that identifies what a good learning environment should be. Biggs (1996) refers to earlier work by Biggs and Moore (1993) which identifies what the characteristics of an environment that fosters good learning. He then goes on to show that these factors may not be present in "Confucian -heritage" culture (CHC) classrooms. He posits. however. that the results indicate "... that highly adaptive modes of learning emerge from CHC classrooms" (p.50). The basic point that Biggs makes is that deep learning does occur in these classrooms despite Western assertions that the environment as they perceive it is not conducive to this development. It may well be that ".. what some Western observers are seeing is not what they think it is" (p.50).

Stevenson and Stigler (1992) cast doubts on whether or not the stereotype of the teaching style in these classroom exists. Hofstede (1986) discusses the teacher-student relationship in terms of a power- distance relationship. It is basically an acceptance of a hierarchical framework. One's role is determined by one's place and no further justification is needed. One does not need to earn respect it is given as a function of ones position and role. External motivation may be redundant in that students understand and accept the fact that effort is expected of them. Chinese students are more cooperative (Leung and Bond 1984), and value education highly and accept greater personal responsibility for learning (Salili. 1996). Such a relationship does not necessarily result in a sterile environment nor an aloof relationship between student and teacher. Teachers also have been shown to have a relationship with their students that purvey student centeredness which is at variance with perceived role as authoritative. Biggs (1996) maintains that the! arc respected figures but in their teaching mode there is a complex social interaction which may be quite warm. Again to an untrained observer such interaction may go unnoticed It may also be extremely difficult to' foreigner to adapt to this unfamiliar role as benevolent dictator so to speak.

Although the focus of this paper is on the problem of the Asian learner and the Western teacher. it is interesting to note that in a publication on The First International Conference on Cross-Cultural Education in Circumpolar North (see Darnell 1972) many of the same cross-cultural concerns were echoed. It may be that the problems are generic and not specific to any cultural group. That there are problems and issues in teaching and learning in an enviroment where cultural. linguistic , and philosophies difference exist between teachers and learners not only from the brief review of literature presented above but also from a logical perspective. The main issue we are facing are what the consequences of these difficulties and how we minimize them.

We are all products of our culture and to a great degree cherish and respect that culture. It influences us both consciously and unconsciously in all aspects of our lives and it takes a concerted effort to overcome the effects of our culture. Whether it is possible to overcome cultural influence is a question beyond the scope of this paper. It is quite common, however for most open-minded people to overcome their cultural limitations and accept the behaviors of people from different cultures. Even here, however, one must be cautious. Sometimes this willingness to understand has unforeseen and unintended consequences. It is possible to misjudge why students apparently do not fully appreciate or understand our teaching techniques or our beliefs regarding teaching and learning. We may assume there are cultural factors operating when in truth some students may not be as able as we assume. This a from of reverse bias which must be avoided.

A rather intriguing possibility exists when we look at faculty -faculty relationships. There are many occasions when cultural differences can cause division and misunderstanding among faculty Western faculty for example may not fully understand the reticence of our Asian colleagues. They appear to be reluctant to engage in open debate or question authority. We apply our cultural. Expectations for University lecturers and do not respect their posture and totally disregard the cultural heritage behind their behavior. On the other land, our Asian colleagues may view our willingness to openly confront authority and to publicly disagree with our colleagues as rude, overbearing, undisciplined and uncultured. They do not recognize the cultural heritage behind our behavior and judge our behavior as we do their behavior by the standards that have guided their development and lives.

At the same time both groups must guard against using their cultural heritage as a shield. It is necessary for each to learn how to certain culturally acceptable behavior from unacceptable behavior the respective cultures. cultures behaviors are unacceptable no matter what the cultural setting whether it be behaviors that might be described as aggressive or as withdrawn. This is not an easy task and how to do this training most effectively is a research project waiting to be conducted. Merely working or socializing with each other is not enough. Respect for and understanding the mores of another culture can only be accomplished through education, socialization, and intensive interaction.

A personal example at this point might help to illustrate how faculty-faculty relationships are tenuous especially when major issues are confronted. The issue is open criticism or questioning of practices/curriculum that had were in place in my department Special Education. When I first visited some of the schools in Hong Kong it was an eye opener. My initial reaction was shock. Much of what I experienced was not in accord with current practices in the west. My colleague from Australia shared my feelings, We were also surprised at the Fact that tile program was categorial in nature. We set out to make changes. We knew the truth, the way and what should be the best practice for educating special education teachers and children with special educational needs. In order to make changes, we engaged in many open and heated (at least on our part) debates with our colleagues. We prevailed: there were changes in the course. On reflection, it is difficult for me to determine why we so adamantly engaged in these debates Was it because we were right or were we trying to impose our value system on a system that has different cultural beliefs of which we were either unaware or did not appreciative. The cost of these changes is unclear. Our curriculum is beginning to look like a Western curriculum but is it fully accepted by our colleagues who are teaching in it? In fact I am reexamining my belief that I knew the best way to educate Special Education teachers in the Hong Kong context. By imposing my cultural values and passing judgment on another culture, I may have done a disservice to my students and ultimately to their students- the children with Special Educational needs in Hong Kong.

This example illustrates how a philosophical belief and what are considered best practices in the West were transported to Hong Kong in this instance with little or no regard for the existing situation and cultural practices in Hong Kong. Interestingly enough some of the` Western practices are carried back to Hong Kong from 'natives who receive their training in the West. This places them, as lecturers in a very interesting position (Katchen 1989). At my institution pedagogical knowledge reflective practice. action research. portfolio assessment are examples of concepts that guide curricular discussion. Support for o these decision often transcend cultural heritage. Whether or not. these concepts are easily adopted to the Hong Kong primary and secondary school system is a question that bears researching especially in light of the academic success of East Asian students (Stevenson and Stigler 1992) under systems that do not appear to foster such success. Is this an example of bias that has been fostered by exposure to another cultural perspective which has changed one s thinking and beliefs regarding educational practice?

What approaches might be incorporated to address this problem ? The following suggestions reflect the through of the author and the opinions of colleagues derived from conversations on the topic. A system might be established where colleagues from different cultures are paired together much like a big sister/big brother program purposes would be to provide each with an opportunity to learn from each other and serve as purveyors of each others culture. It might even be possible to establish teams which could serve the same purpose. Establishment of a program like this would require much planning and care. Another possible approach that might be considered include a series of staff seminars. These would involve a few staff meeting and discussing topics relevant to each other's culture. A program may include a presentation on topic such as philosophy a film discussions based on a selected readings Sharing of research interests or encouraging cross-cultural research teams could lead to greater understanding. It may help to set-up a system where local faculty could help expatriate stall to adapt their teaching material to meet the cultural needs of the students while the expatriate staff could assist local staff in getting material accepted by journals written in English.

Although the above activities deserve consideration there is a program that many of my Western colleagues identity as essential. This is an induction program for new faculty. Many institutions hold these programs at the beginning of the year but it would probably be wise to have these programs throughout the year. Under certain circumstances it might be advantageous to hold such a program for local colleagues especially if there is an influx of expatriates. The initial program for the new faculty should focus on acquainting faculty with the rules of etiquette in the culture, possibly providing staff with some simple phrases that would assist them in every day interactions – eating, transportation, etc., and provide a guide book or packet of material with such things as maps. shopping information, and social activities. Another point that should be emphasized is that acknowledgment should be made of the fact that difficulties and misunderstandings may a arise until both groups are fully acclimated to each other's culture.

We have looked at faculty interaction and curricular decisions. We will now focus on the student. It is obvious that the same cultural differences that exist between Western and Asian faculty members also exist between Asian students and non-Asian lecturers. The hierarchical relationship has been reported above and may be at variance with man! teaching methods employed by Western lecturers.

Western lecturers for example, may promote and expect discussion, foster competition. seek deep conceptual learning, encourage student directed-learning and other approaches that reflect in many respects a belief in a democratic approach to teaching and learning At times. Western lecturers may not be aware of how difficult it is for Asian students to adjust to these methods. While the Western lecturer has expectations as to what is the best learning; environment, so too do the students. Unfortunately, it is not easy for these students to express their misgivings and concerns given their cultural background and the role prescribed to them as students.

It is rather quixotic that awareness of these difficulties have often had researchers turn to ways of changing the curriculum or ideas as to how to sensitize the lecturer. Little attention has been given to sensitizing the students, In fact, the apparent neglect of strategies and programs to help students to adjust to the teaching style of the lecturer may not only inhibit learning Westerners but may also reinforce stereotypes that students have regarding My lecturing style is rather informal. I like to ask questions, pursue thoughts and ideas as they arise in the class and do not generally present material in such a fashion that one could take notes in a very systematic manner. This style most certainly is very difficult for the Chinese learners and all of my assurances that they are being given the necessary information may not alleviate their anxiety. In contrast some of my Asian colleagues present material in a lock-step fashion provide copious hand-outs and have a very set plan that they follow religiously. One might conclude that these "imports" are not as good as the locals; in tact students have remarked at times that they want more specific information and more handouts in line with their experience in the past. I am changing my approach but how far can I and should I go? Is there a middle ground? Is it reasonable to ask students to adjust to different styles'? The obvious answer would be yes, if there were a concerted plan to sensitize and familiarize the students with the background of their lecturers.

The fact that such a program does not exist may result in polarizing the views that students bring to class or intensify their reaction to a different approach to learning. Although individual lecturers might be able to help students overcome their cultural feelings, the generalizability of this to other lecturers may not occur.

Lyon et al (1996) in a preliminary study of student-supervisor discourse across cultures revealed the need to assist students to understand the communication style of non-native speaking supervisors. Further, it was ascertained that the style of supervisor interaction often conflicted with students' expectations Chinese students expected supervisors to be critical and focus on difficulties rather than providing emotional and psychological support. Western supervisors generally felt that the latter approach was most appropriate. It is pervious that both parties need to be helped to understand the other's perspectives if quality supervisory interaction is to occur. The need for programs to assist students to adjust to Western lecturers is illustrated by this example. What type of program would be most effective has yet to be determined. It may be that many of these suggestions that were presented above to assist faculty in adjusting to a different culture might also be instituted for students.

It has been clearly shown that bias can and does exist in situations where people from different cultures interact in a fairly intensive fashion. Although in an tertiary institution the constituent members have a common purpose and are expected to be more understanding than the general populace, the same stereotypes and insensitivity and misconceptions regarding other cultures flourish. The only way to overcome these very serious issues is through approach that involves the whole institution and all its members. especially faculty and students.

This week the ideas in this paper came back to haunt the author. In my class I saw the student whose conversation is recorded above. She was presenting a research proposal to the whole class. I was quite excited because of the role that she has played in this paper and felt compelled to inform her about her contribution I made a general announcement to the whole class about her role in this paper. She got quite upset. I was perplexed and tried to calm her down in front of the class. This was not working I then suggested that she see me at the boreal<. She suggested that I see her at the break. Obviously, this is not behavior one expects from a Chinese student. I agreed to seek her out. At the break, we started to talk; and I realized that I had violated the exact principle that prevented her from answering the question as described above. I apologized and explained that this is a perfect example of insensitivity and a Western lecturer forgetting that he was in a different culture. Fortunately she accepted my apology. To combat bias and insensitivity one must be always aware of the other person as shown by my experiences

References

Bickley V. (1989) Overture. In Bickley. V. *(ed.) Language Teaching and Learning Styles Within (In'/* Across *Culture (pp.* 8-19). Hong Kong: Institute of Language in Education.

Biggs. J.B. (1996) Western Misperceptions of the Confusion-Heritage Learning Culture. In Watkins, D.A. and Biggs J.B. (eds.) *The Chinese Learner'. . Cultural Psychological and Contextual Influences (*pp.45-67). Hong Kong Comparative Education Research Center.

Biggs. J.B. and Moore. P.J. (1993) The Process *of Learning* Sydney: Prentice Hall of Australia.

Cheng, K.M. (1995) The Neglected Dimension: Cultural Comparison in Educational Administration in Wong KC and Cheng K.M. (eds.) *Education leader ship and* Change (pp.87-102) Hong kong University press.

Darnell. F. (ed.) (1972 *) Education in the, North* Nome: University of Alaska.

Ellis. D.E. (1994) Contributions of Cross-cultural Research in the Transfer of Western Teaching Styles *to* Vietnam APEX-J... *Asia-Pacific Exchange (electronic) Journal*

Gilbert. R.A. (1989) 1 he Dangers of Learning, Styles in the Mundarin/English Classroom. In Bickley, V (ed.) *Language Teaching and Learning Styles Within and Across Culture* (pp. 227-235) Hong Kong: Institute of Language in Education.

Glenwright P. (*1996) (Chinese C Culture c' and Western Culture --- Strengths and problems in English Language Education in Hong Kong.* Paper presented at the 9th World Congress on Comparative Education. Sydney University Australia.

Hofstede, G. (1986) Cultural Differences in Teaching and Learning *international journal of intercultural (~1 Relations 10.* 301-320.

Katchen. J.E. (1989) Teaching English -- American Style -- at a Chinese University. In Bickley. V. *(ed.) Language teaching and Learning Styles Within and Across Culture,* (pp.81-89). Hong Kong: Institute of Language in Education.

Lee. W O. (1996) The Cultural Concept for Chinese Learners: Concepts of Learning, in the Confucian Tradition. In Watkins. D.A. and Biggs J.B. (eds.) *The, Chinese Learner Cultural Psychological* and *Contextual Influences (*pp.25-41).Hong Kong. Comparative Education Research *Center*

Leung. K. and Bond. M.H. (1984) The Impact of Cultural Collectivism on Reward Allocation. *Journal of Personality and Social Pscychology ,47 (4), 793-804.*

Lyon. P. (1996) *Comparative* Study Supervision Behavior of *Native, and Non-native Language Speaking Supervisions in Teacher hit/ T raining at the Hong Kong institute of* Education A paper Read at the 1 13th Annual Conference The Hong Kong Educational Research Associations. Hong Kong, Nov. 1')')6.

Owens. K. (1989) Teacher Training and Intellectual Frustration. In Bickley, V. (ed.) *Language* Teaching *and Learning Style Within and* Across *Culture (*pp.34-40). Hong Kong: Institute of Language in Education.

DEALING WITH INTERNATIONAL DEMAND FOR TEACHERS: THE EFFECTIVENESS OF VARYING PREPARATION PROGRAMS

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The international movement to afford alternative routes to certification for those wishing to teach has occasioned controversy over the value of such programs. In the United States growth of the alternative certification (AC) movement has been rapid and by 1993 some 40 states had instituted AC programs (Sindelar & Marks, 1993). Nevertheless, surprisingly few substantive investigations have been conducted into their effectiveness. The results of those studies now available are somewhat contradictory. Internationally, there have been a variety of attempts to deal with teacher supply shortages through alternative training and certification.

The present study investigates alternative versus traditional certification programs on the attitudes and abilities of program graduates and on the achievement of their students. The study itself, although conducted in the United States, is based on an international framework of examining varying methods for dealing with supply and demand of teachers in different countries through a variety of methods including alternative preparation as described here.

There are four assumptions made in the examination of alternative certification, and other efforts, to deal with the problem of a limited supply of teachers which exceeds demand. It is acknowledged at the outset that these assumptions are debatable. They are not statements of fact, but rather, assumptions made which form the context for this study.

The first assumption is that it is the obligation of the agencies which govern schools to fill the classrooms with individuals described, however broadly, as "teachers." While the professional qualifications of these individuals may vary based on the traditions and customs of a country, level of compensation and respect for the teaching profession, and simple demographics, it is the assessment here that not having individuals in the classrooms, closing schools, and denying students an education is not an acceptable alternative for dealing with the problem of an inadequate supply of fully trained and certified professional teachers.

The second assumption is that employing schools or school systems will generally select the best available personnel to staff schools. While it may be argued that there may be motives other than the desire to hire the best individuals, such as cost-cutting measures, it is argued here that employers usually have the best intentions, and when given the opportunity will hire fully qualified and certified personnel. Those such as Berry (1988) have in some ways supported this contention, but also identify a number of other issues which impact labor market choices for the public schools of the 21st century.

Third, it is believed here that alternative certification programs are not devised with the express intent of compromising the integrity of traditional certification programs. That is, alternative certification programs represent a potentially legitimate means to fill classrooms that cannot be filled with traditionally certified personnel or to provide a

987

"fast track" for certain special need areas, such as teachers of special education students, minority teachers, or male teachers in certain under represented and high-need areas.

Fourth, and in conjunction with the previous assumption, it is felt that alternative certification programs do not, by and large, represent the attempts of specific groups outside of traditional teacher education programs in the universities to "wrest control" of teacher education programs. Such control has been perceived as a political agenda for certain groups such as professional organizations. This political agenda has been forwarded by those such as Galvin (1996), who describes "government interventions into initial teacher education" in England and Wales as an attempt to make "a political agenda to proceed regardlessly." Rather, alternative approaches are perceived here as one of the measures utilized to meet supply needs.

Some methods other than alternative certification have been used to increase the pool of qualified teachers. These approaches are examined from an international context. For example, in ROC-Taiwan reform efforts are described by Chiang and Green (1995)and include substantive underwriting of the cost of initial teacher preparation. They note that:

> *Most significantly, the government subsidizes the education of its teaching force by paying the tuition cost for students enrolled in the normal universities and teachers colleges. Of course graduates are obliged to teach for four years, in addition to the internship year, and usually are assigned to schools by the government.*

Certainly, subsidization of the cost of education followed by service rendered to cancel loans is not an uncommon method to try to enhance the supply of teachers.

Another method of dealing with the supply and demand issue is to provide better, more consistent inservice training, enhancing the skills of teachers and keeping more of them within the teaching profession for longer periods of time. Recommendations for this approach may be found in the report In-Service Training of Teachers in the European Union and the EFTA/EEA Countries (Eurydice, 1995). This study, covering 15 members of the European Union and the two EFTA/EEA countries that participate in Eurydice, looks at a number of alternatives through in-service to increase and maintain an adequate supply of teachers.

Finally, in looking at various methods of dealing with the supply and demand issue, one must recognize that what is alternative and what is traditional varies from country to country. For example, in the United States a traditional program might be considered to consist, at a minimum, of a bachelor's degree including professional pedagogy courses. On the other hand, this was not always the case in the United States. Within the last half century teachers who graduated from a normal school with two years of training, or even high school graduates with additional temporary training in the summers, were recruited as fully certified and trained teachers. Examples of differences may be found throughout the globe. For instance, in a recent report by Darling-Hammond and Cobb (1995), in which APEC member countries were described in terms of teacher preparation and professional development, they reported on reforms in education in Hong Kong:

> *In 1993, Hong Kong began the first phase of reforms intended to improve the quality of teaching in primary schools. The intentions of the program were to increase the qualifications of at least 35% of the primary school teachers to [hold] a bachelors degree by the year 2007.*

Thus alternative preparation and certification depends, by definition, on what is considered traditional. While all of these methods of dealing with supply and demand, and many others, have been in practice for some time, the attempt to create alternative certification programs is one of the major avenues for dealing with the supply and demand issue. Generally speaking, an alternative certification program means giving limited training to an individual and then placing him/her in the classroom for "on the job learning." There are various international iterations of these types of programs. Four examples will be briefly considered.

In Sri Lanka the rising demand for teachers vastly outstripped the number of professional educators. An alternative certification program was employed which is described thoroughly by Amaragunasekara (1992), who noted that distance education through a variety of technological delivery modes was employed. Non-graduate, in-service teachers were placed in the classrooms and an agency was charged with the responsibility of developing cand supporting the induction program of these teachers via distance technology.

In South Africa there are two main methods for initial training and certification of teachers. The first option is a three-year degree and a higher education diploma of one year. The second is a shorter integrated teaching degree presented as a one-year teacher education diploma. This approach has been used more heavily recently due to the general shortage of teachers in South Africa (McDonard, 1995). In one such effort, the University of South Africa, which has historically been involved in a traditional form of distance education known as "correspondence classes," devised a unique approach. The entire Teaching Practice Program is contained in what is known as a "tutorial letter," or workbook, which is an instrument of guided self study to prepare the person for teacher service. This includes guidance related to on-the-job practicum training in a "learn while you work effort."

Clearly, there have been forays by a number of institutions other than traditional teacher colleges and universities into the pre-service training of educators. In an analysis of changes in teacher training in England and Wales (Hake, 1995) presents an interesting discussion of the enhanced role of school based training systems which have reduced the role and responsibilities of higher education. These particular training programs emphasize extensive internships with mentoring and place more emphasis on "on the job training" with minimal emphasis on prior preparation for those experiences. Haydn's point of view may be best expressed in the title, which begins with the phrase "A Bridge too Far?"

Finally, in Japan, as in many other countries, there are both alternative and traditional certification programs embedded in the curriculum of institutions of higher education. In essence, this demonstrates that the "alternative" portion of "alternative training and certification" does not necessarily connote a program conducted by those outside of the University. Nor does it necessarily imply heavy on-the-job training. In some instances it simply represents two versions of training done within two different types of institutions of higher education. For example, Shimahara and Sakai (1995) describe two very different methods of preparation of teachers. They note that:

> *The flaw of post-war teacher preparation was evident especially in certification requirements at the secondary level that were in force until 1990. Merely 14 credits of professional studies, including two credits of student teaching, equivalent to two weeks of clinical experience, were required. Students seeking teacher certification at institutions whose primary mission was not education tended to meet only the minimum requirements. These were the students who of late fill two thirds of the lower secondary positions and 9/10 of the upper secondary positions in public schools. Undoubtedly these graduates had much greater depth in their special subject areas than graduates of colleges of education but the adequacy of their professional studies was highly questionable.*

The relative effectiveness of these approaches is difficult to judge, for existing evidence is scant and occasionally contradictory. In addition to the diverse international contexts of these approaches, other factors have contributed to the inconsistent research findings (see Darling-Hammond, 1991) regarding their effectiveness. Hawley (1990) identifies the following design problems: (1) comparing AC and TC teachers from different locations, (2) confusing high AC entry requirements (e.g., test score criteria) with program effectiveness measures, (3) relying on administrators to gather performance data, (4) relying on local measures of performance, (5) employing small samples, and (6) failing to distinguish among the AC programs compared. The present study was designed to circumvent these difficulties in evaluating the effectiveness of a particular, university-based AC program

The Alternative Program

In May, 1989, the university initiated an AC training model for 70 middle grades teachers. The program included individualized and intensive programs of study designed to comply with then-current Georgia Certification Standards (provisional). Coursework was undertaken in the summer quarter of 1989 to qualify the 70 participants for provisional certification and employment in Georgia public schools by fall. Sixty-seven of the 70 participants successfully completed the coursework and were placed in classrooms in the fall of 1989. Depending on initial assessments, students took between 15 and 25 quarter hours (the equivalent of 9-15 semester hours) prior to the beginning of their teaching assignments in the fall.

During their initial year as teachers, they were heavily involved both with additional coursework and with mentoring from university faculty and public school mentors in an effort to support their initial instruction. The nature of their supervised clinical experience was carefully devised. The experiences were designed recognizing that unsupervised practice--that is, placing teachers in classrooms without university supervision or carefully controlled mentor interaction--can lead to ineffective practices (Grossman, 1989; Hawley & Rosenholtz, 1984; McKibbin & Ray, 1994). Indeed, the program was designed in the belief that on-the-job feedback from supervisors and mentors is a distinguishing feature of effective alternative programs.

Although interns in this program had their own classrooms, they also received a substantial amount of supervision. A university supervisor observed each teacher 8 times during the year and held postobservation conferences. The supervisor also met with mentors on an individual basis in order to monitor the success of the teacher-mentor relationship. Among the courses teachers took during their first year on the job was a biweekly class taught by the university supervisor and geared toward examining common problems, exploring solutions collaboratively, and generally providing support. Teachers also took regular course offerings depending on their assessed needs for certification.

During subsequent years, university support ceased, except in terms of the additional coursework needed by some of the participants to earn regular certification. However, mentor relationships continued on an informal basis.

Study One

The initial study was conducted to examine differences in classroom teaching practices between those educated in TC and the AC program. At this most basic level, behavioral differences of teachers were examined in relationship to training differences.

Participants

As noted, an AC training model for 70 middle-grades teachers was initiated. The program included individualized and intensive programs of study designed to comply with then-current provisional certification standards. Coursework was undertaken in the summer to qualify the 70 participants for provisional certification and employment in public schools by fall. Sixty-seven of the 70 participants successfully completed the coursework and were placed in classrooms. Of the population of 67 AC students, 41 were traced to teaching positions accessible to the campus three years later. These 41 constituted the AC sample. Of the remaining 26, 15 were traced to teaching positions more than 100 miles from campus, three held nonteaching jobs in schools (two social workers, one counselor), one was on leave, one taught in a microcomputer lab so that matching was not feasible, and six could not be located.

These AC teachers were then matched with TC counterparts. They were all matched to teachers who began in the same year and thus had three years of teaching experience. They also taught the same subject (s), at the same grade level, at the same school. These teachers graduated from varying TC programs from in-state and out-of-state and from public and private institutions.

Instrument and Data Collection

A 15-item, 4-node rating scale was used to evaluate observed lessons in terms of specific dimensions of instruction known to be causally related to learning (e.g., see Hunte& Russell, 1977; Rosenshine, 1986). The instrument comprised 2 subscales, one involving Effective Lesson Components (9 items) and the other Effective Pupil-Teacher Interaction Components (6 items). The Effective Lesson components included (1) Focus, (2) Objective and Purpose, (3) Goal Direction, (4) Exposition, (5) Modeling, (6) Practice, (7) Monitoring, (8) Feedback and Adjustment, and (9) Closure. The Effective Pupil-Teacher Interaction components included (1) Questioning Strategies, (2) High Pupil Participation, (3) Creative and Enthusiastic Presentation, (4) Appropriate Reinforcement, (5) Appropriate Constructive Criticism, and (6) Appropriate Negative Consequences. Each category was precisely defined.

The instrument and the training program had been carefully and systematically validated prior to the present study (Miller & McKenna, 1988; Miller, McKenna, & Harris, 1989; Miller, McKenna, & Davison, 1990). Two trained teachers observed and evaluated all 82 of the subjects. The observations were "blind" in the sense that the observers knew nothing of the fact that 41 of the subjects were alternatively certified and 41 were traditionally certified. They were informed that they would be observing teachers in order to establish an evaluation data base for the instrument. The observations were unscheduled, so that if an intact lesson was not being taught the observer would either stay until an intact lesson was begun or return on another occasion. They then arranged visitations to each pair of teachers. Both observers were present for all of the lessons observed so that their ratings for each category were juryed, in case of disagreement, after the completion of their script tapes. In nearly all cases, however, jurying was unnecessary since the two ratings coincided. Both of the teachers in each pair were visited on the same day, both were observed at a prearranged time suggested by the teachers and both were encouraged to select a time when new material was being introduced. Both observers had their observational skills validated prior to any data collection.

Results

Preliminary analysis steps were conducted to identify outliers and assess assumptions for the multi variate analysis of variance (MANOVA) procedure. First, inspection of histograms of each dependent variable for each group did not suggest the presence of outlier observations. Second, the assumption of multivariate normality was assessed by examining the histograms mentioned above. Inspection of the plots suggested the assumption of multivariate normality was tenable. Finally, the scores of each teacher are considered to be independent. Thus, no unusual data values were identified, and MANOVA assumptions appeared to be met.

Means and standard deviations for all 15 categories of teacher behavior were computed for each of the two groups. Occasional ratings of "NA" caused the number of subjects to vary for some categories. Means and standard deviations were also computed for the two subscales. In this case, teachers who received a rating of "NA" for any item in one of the two subscales were eliminated from the computation of the mean for that subscale. Descriptive statistics for all categories and for the two subscales appear in Table 1. As evident from examining Table 1, the difference in sample means between the two groups appears to be small for all the individual categories, with the largest difference being approximately 0.2.

Three separate MANOVAs were used to identify if the small sample differences between groups that were obtained in the study reflect real differences in the populations or are due to sampling variability. In the first MANOVA, the two subscales were used as the dependent variables. A nonsignificant Wilks-lambda resulted, Wilks-lambda = .98, F (2,31) = 0 4, e = .69. Thus, no group differences on the two subscales were present. In the second MANOVA, the nine Effective Lesson Component categories were used as the dependent variables. Again, no significant differences were detected, Wilks lambda = .76, F (9,24) ^{24} = 0- 8, p = .59. Finally, the six Effective Pupil Teacher Interaction measures were used as dependent variables. Once again, no significant differences were observed, Wilks-lambda = .93, F $^{(6, 66)}$ = 0 9 p = .53. Thus, the analyses suggest that the differences obtained in the study between traditional and alternative groups were due to sampling variability and do not reflect true differences in the populations.

Table 1
Contrasts Between the Traditional and Alternative Groups

Variable	Group						Point estimate of contrast	SE	99% Confidence interval
	TC			AC					
	N	X	SD	N	X	SD			
Focus	32	2.9	1.0	41	2.8	0.9	0.15	0.27	(-0.57, 0.87)
Objective and Purpose	16	2.6	1.0	18	2.7	0.9	-0.14	0.26	(-0.81, 0.54)
Goal Direction	41	3.4	0.6	41	3.3	0.6	0.12	0.14	(-0.25, 0.49)
Exposition	41	3.1	0.4	41	3.1	0.6	0.03	0.12	(-0.29, 0.35)
Modeling	41	3.1	0.6	41	3.0	0.7	0.09	0.16	(-0.34, 0.52)

(table continues)

Variable	Group						Point estimate of contrast	SE	99% Confidence interval
	TC			AC					
	N	X	SD	N	X	SD			
Practice	34	3.2	0.5	41	3.3	0.5	-0.10	0.13	(-0.45, 0.25)
Monitoring	41	3.2	0.7	41	3.2	0.7	0.01	0.15	(-0.37, 0.39)
Feedback and Adjustment	41	3.3	0.6	41	3.1	0.7	0.19	0.15	(-0.20, 0.58)
Closure	34	2.1	1.0	40	2.2	0.9	-0.01	0.25	(-0.66, 0.64)
Effective Lessons Subscale		27.9	4.4		26.8	4.2	1.16	1.47	(-2.87, 5.19)
Questioning Strategies	27	3.2	0.5	38	3.1	0.6	0.06	0.13	(-0.28, 0.40)
High Pupil Participation	41	3.4	0.7	41	3.5	0.6	-0.05	0.15	(-0.45, 0.35)
Creative and Enthusiastic Presentation	41	3.1	0.7	41	3.0	0.7	0.12	0.16	(-0.31, 0.55)
Appropriate Reinforcement	40	3.1	0.5	35	2.9	0.5	0.16	0.12	(-0.16, 0.48)
Appropriate Constructive Criticism	41	3.1	0.5	36	2.9	0.6	0.22	0.14	(-0.15, 0.58)
Appropriate Negative Consequences	33	2.8	0.6	41	2.8	0.6	0.09	0.14	(-0.28, 0.46)
Effective Pupil-Teacher Subscale Interaction		18.7	2.6		18.2	2.6	0.49	0.60	(-1.10, 2.08)

Follow-up analyses were also performed to identify if the study had adequate precision to support a finding of no practical importance in the population. To identify if the study had adequate precision, 99% confidence intervals were computed for each of the contrasts. The more stringent 99% confidence level was selected to protect against the inflation of family-wise error rate. The intervals were then compared against a threshold value of one for the individual categories and values of nine and six for the two subscales respectively, with the belief that a one-unit change on the 4-node rating scale reflects an important difference. Confidence intervals which lie completely below the value of practical importance allow us to conclude that we have high confidence that the true population difference is of no practical importance. The results, shown in Table 1,

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suggest that this study had sufficient precision of estimation, as the range of each of the confidence intervals lies entirely below the threshold values of importance. Thus, there does not appear to be reliably important differences between the alternative and traditional teaching groups for the behaviors examined in this study. For practical purposes then, it appears that we can accept the null hypothesis that groups do not differ on these sets of teaching behaviors.

Discussion

The fact that the two groups did not significantly differ on any of the dimensions surveyed gives rise to alternative explanations. The most apparent is that certification programs did not affect these teachers' performance in a differential way. Of course, these data were gathered some three years after preservice training for TC teachers had ended, and intervening professional experiences may have had an equalizing effect. The existence of ongoing mentorship was, after all, designed to accomplish exactly this result. Anointervening factor was that the AC teachers, like their traditional colleagues, were faced with annual evaluations based on a rating scale that, while different from the instrument used in the study, nevertheless drew on the same effectiveness literature.

An alternative explanation might have been that the two observers exhibited a response set, such that ratings tended to cluster around the moderate node (rating = 3) even when the observed evidence suggested otherwise. This possibility seems unlikely, however. Examination of Table 1 reveals rather sizeable standard deviations (for a scale spanning only three units), indicating considerable variance in the ratings given. Moreover, in the case of Closure, the mean for both groups differed markedly from the means for most other categories. Finally, the training program used to prepare the observers had been validated through studies that established its effectiveness in developing the ability to produce ratings consistent with observed evidence (Miller & McKenna, 1988).

The most reasonable conclusion seems to be the most obvious: Alternative certification did not lead to inferior practice among teachers evaluated at a point three years into their careers. It is important to remember, however, that the program through which these teachers passed did not end with graduation, but involved a two-part mentoring component that accompanied and supported them through their initial year. This combination of preparatory coursework followed by supervised application of what is learned essentially exemplifies the same direct instruction model on the basis of which these teachers were evaluated.

Study Two

A second study was conducted in order to examine the effects of AC vs. TC teachers on the achievement of their students. The treatments previously discussed in relation to Study One remain the same in Study Two. The sample, instrument, data collecting and statistical analysis all differ.

Participants

A subset of subjects from Study One was drawn. Of the 41 AC teachers and 41 TC teachers who were subjects in the observational analysis, those who were in self-contained classrooms at the fifth and sixth grade level were selected. The reason for this limitation was the desire to have students who were taught all of their basic subject matter competencies in a given year by a single teacher. Those teachers who were in a subject-matter-defined teaching position in middle grades classrooms, such as middle grade science, could not be fairly evaluated because of the indirect alignment between their teaching, the teaching of others, and the focus of the achievement test score. On the other hand, in the self-contained classrooms, where both pre- and post achievement test scores were available, entry-level differences could be determined in order to control for prior differences of achievement based upon interaction with other teachers or any other related factors. Post-test gains could then be attributed to the instruction of a single teacher rather than a collection of teachers for each individual student.

Eighteen classrooms of students participated in the achievement test score analysis done in Study Two. For each of these 18 classrooms all students who were present for the entire year and who produced a pre-test score and a post test score, were utilized. The resulting sample of students consisted of 188 students taught by alternatively certified teachers and 157 students taught by traditionally certified teachers.

There were no apparent systematic biases in the way students were placed into these classrooms. They were not ability grouped, therefore there was no systematic reason to suspect that there would be pre-test differences. Nevertheless, pre-test scores were collected for all subjects. Differences between the AC and the TC distributions of students' scores were analyzed. There were no entry level differences approaching significance on either the total reading or total math variables, or on any of the other subtest scores.

Instrument and Data Collection

The Iowa Test of Basic Skills was administered as a post-test at the conclusion of the academic year. The reliability and validity of the Iowa Test of Basic Skills are well documented. The total reading and total math subtest normal curve equivalent scores (NCES) were the primary basis of analysis. Additionally, three other math subtests, including concepts, problem solving, and computation, NCE scores were also analyzed to provide some general indicators of some different types of thinking skills.

The achievement tests were administered under normal standardized procedures by the classroom teachers and were retrieved from the district-wide data base. Students with post-test scores in AC and TC teachers' classrooms were then traced backwards to pre-test scores. As noted, only those subjects were retained in the sample who had complete pre-test and post-test scores available and who were in attendance for the intervening academic year.

Results

NCE means and standard deviations for total math and total reading subtests, as well as the three additional math subtests, are reported in Table 2. After determining that there were no preexisting differences based on pretest measures, it was determined that no covariate was needed. The data met the same major assumptions for MANOVA as the data analyzed for Study One. The post-test MANOVA procedure was used to control for family-wise error rate and test the hypothesis that group population means did not differ for any of the dependent measures and combinations. Further, the basic assumption was met in that there was a conceptual relationship between the nature of the dependent variables and a statistical test of the quality of variance assumption was conducted and met. The normality of the distributions was examined with histograms and appeared to be met. Comparison between the AC and TC students' test score means were then conducted by a multi-variate analysis of variance (MANOVA). A non-significant Wilks-lambda resulted, $^{(F(1,158)}$ = .99, p = .83) No significant difference was observed in the effect of the independent variable (method of training) on the collective dependent measures. Some further examination of the five post-test means indicated that there were virtually no differences on any of the dependent measures.

Table (2)
Means and standard deviations of NCE's
for total math, total reading and math subtests

Test:		Group			
		TC		AC	
		X	SD	X	SD
Total Math		47.6	18.4	46.9	19.1
Total Reading			44.5	16.2	45.9
	16.1				
	Math Concepts	46.1	17.2	46.0	16.9
	Math Problem Solving	44 5	15.8	46.3	17.6
	Math Computation	41.3	15.1	45.2	15.2

n: TC = 157, AC = 188

Similar to Study One, follow up analyses indicated that Study Two had adequate precision to support a finding of no practical importance in the population.

Discussion

The results of the student output measures closely parallel those of the observational study. That is, there was no difference in average student achievement test score levels, based upon whether students had been taught by AC or TC teachers. Although this was not an experiment in that there was no random assignment of classrooms, it should be noted that there is very little indication that any entry level biases would have affected these test scores. This is true, due to the lack of any grouping or clustering assignment processes used by the school district that would tend to create differences as previously noted and by the fact that a random procedure used within grade levels, within buildings to assign students to classrooms was used. Insofar as this limited achievement test score measure (ITBS) reflects student learning in the areas of reading and mathematics, it seems safe to assume that there were no relative advantages or disadvantages in terms of student mean output based upon whether or not they were taught by AC or TC teachers.

Certainly there are a myriad of issues that go into determining a student's performance on a standardized achievement test. Clearly, the value of these achievemtest scores may be questioned. Nevertheless, there were no indications of any trends of differences in terms of student output based upon these measures used in a district-wide procedure. That is to say, there appeared to be no effect of type of teacher training on student achievement.

Study Three

The third study was qualitative rather than quantitative in nature. It was conducted in order to gain insight into the perceptions of teaching abilities held by AC and TC teachers.

Subjects

The 82 teachers who made up the 41 pairs of matched subjects in Study One constituted the total sample for Study Three. All of the same selection and matching procedures, which applied in Study One, applied in Study Three.

Instrument and Data Collection

A direct interview procedure was developed to collect qualitative data from all subjects. The protocol contained three major areas of questions and some recommended supportive probes in each of these three areas.

The interview conditions involved a face-to-face meeting between a trained interviewer, who was also a classroom teacher, and each of the subjects in his/her own classroom. Responses were not tape recorded in order to try to avoid some formalization of response and to create a more "discussion"-oriented atmosphere. The interviews were conducted as "informal discussions" between teachers concerning perceptions of their experiences. As in Study One, practicing teachers were used to gather data because of their classroom experience and, in the case of the interviews, because of the likelihood that interviewees would be forthcoming when reflecting with a peer. The three major areas discussed included: teachers' perceptions of their preparation level when they began their job three years previously, teachers' perception of their current level of competency, and teachers' perception of problems encountered across their three-year careers. Because tape recording was not done, formal transcripts were not made, but the trained interviewer kept complete notes, and later, these notes were transcribed. Similarly to the blind review process in Study One, the interviewer was not familiar with the fact that some of the subjects were AC teachers and some were TC. The interviewer was simply gathering information on teachers' perceptions of the adequacy of their preparation at the beginning of their career, their current level of competence, and what they had encountered along the way. Questions included in the interview protocol were composed so as not to reveal to the interviewer the type of training received by the interviewee.

Results and Discussion

All 82 subjects responded to discussion probes in each of the three areas. Content analysis of the resulting commentary reveals a number of interesting trends. Overall, it is most important to note that although there were differences in the qualitative aspects of the AC and TC teachers' responses, differences within those categories were greater than differences across the categories. The following generalizations with regard to feelings of adequacy of preparation at the beginning of their teaching experience may be categorized as follows.

First, neither AC nor TC teachers felt particularly well prepared. TC teachers sometimes tried to explain this more as the natural tendency to feel inadequate at the beginning of a career, whereas AC teachers felt that something was missing. For example, typical comments from TC teachers, when asked, "How prepared did you feel as a teacher when you started your job?" were:

- I did not feel very prepared. Of course, no one ever feels truly prepared.
- Not too prepared, but not because of the program I was in-it's just the nature of teaching.
- I'm sure that like all first year teachers I had some problems and felt uneasy.
- Like anyone, there was the uncertainty of a new job.
- I had all the theories for teaching, but lacked any real classroom experience in my undergraduate program.

There were also AC teachers who felt inadequate. They tended to feel as though they had gaps that could be traced to their preparation. Examples of comments expressing this feeling include:

- I did not know how to control behavior.
- I did not know how to write a lesson plan.
- Very unprepared, I'm not sure whether student teaching would have helped, but I think so.
- Very shaky, I don't think I would have made it without my mentor.
- Some hands on experience would have been helpful. I had no earthly idea of how to do a lesson.

Second, it is interesting to note that there were more TC teachers who felt that they were adequately prepared than those who did not. Also, the percentage expressing confidence was higher for TC than AC teachers. They made comments like:

- I was very confident. I felt pleased with how my undergraduate program prepared me.
- Fairly prepared. I had been involved some with the schools beforehand.
- Pretty prepared, but then I guess no one goes in completely prepared.

In essence the qualitative responses to the first question could be categorized overall as indicating that both groups were somewhat unsure of themselves. Some of the TC teachers had a higher confidence level, while others felt similarly to the AC teachers.

The TC teachers tended to explain some of their inadequacies as being the natural by product of beginning a new job.

In regard to Question Two, concerning the current feeling of competence to practice, there were little or no differences between the groups. Generally, the comments were indistinguishable. The TC teachers said things like:

- I feel very prepared. On the job experience does wonders.
- I owe a great deal to my mentor. I feel very confident now.
- Experience is the best teacher. There is no substitute for actual classroom experience.
- Now I am very prepared. I feel the comfort that comes from experience.

AC teachers, who might have been expected to place even more value in the more practical experience, did not differ in any way from their TC counterparts who also placed a great deal of faith in on-the-job practice. The AC teachers made comments like:

- I am very prepared now. I have learned how to have good rapport with my students.
- Now I feel I am on equal footing with the teachers who went through the traditional route.
- I have taught several years at the same school, so now I feel confident.
- I am very grateful for the opportunity that this program created for me and for all the help that was provided in the induction program.
- I enjoy teaching more now, I am more relaxed and prepared. veteran mentor really helped.

It would be fair to analyze these data surrounding Question Two as indicative that TC and AC teachers, after having had experience, feel competent and that this feeling of competence is equally shared. As noted, at the end of the three-year experimental period the TC teachers and the AC were not distinguishable based upon their comments concerning their competence.

Finally, the types of problems encountered along the way did not seem to differ in any significant way between TC and AC teachers. As might be anticipated, discipline and classroom management were far and away the most commonly cited problems by both. The ability to deal with special need students, to work with emerging technologies, and to deal with parents were cited less often, but commonly, by both groups. There were a number of the AC teachers who commented favorably on the induction program and the help of their mentor in overcoming some of their initial difficulties.

Summary and Implications

A series of three studies was conducted to address basic issues of research design identified by Hawley (1990) as characteristic of comparative investigations of AC and

TC teachers. His observation that AC teachers are too often compared with TC teachers from other districts was addressed by the use of same-school pairs of TC and AC teachers. Each pair was further matched in terms of subject matter taught and years of experience. Hawley's complaint that different screening criteria for AC and TC trainees may skew samples even before training begins was not a problem in these studies since the AC cohort was not subject to special requirements, such as higher test performance. His concern that classroom observation data often come from principals was met through the use of trained observers who were outsiders to the school and who visited classrooms without knowledge of the certification history of those they observed. The objection that teacher performance tends not to be systematically assessed in comparative studies, or that mandated observation instruments are used, was overcome by using a well-validated instrument with which none of the teachers was familiar.

Hawley also noted that the small sample sizes employed in some studies raise questions about the representativeness of the teachers included as subjects. In the present series of investigations, a relatively large cohort of AC teachers was used in its entirety. Although, expectedly, some attrition occurred after three years, the sample was still highly viable. Finally, Hawley noted that some studies fail to distinguish types of AC programs when data are analyzed. This difficulty tends to occur when the results of several investigations are aggregated, as in meta-analyses and best-evidence syntheses. This was not a problem here. In fact, these results are limited to a single AC program with well-defined characteristics, and it is this clarity of identity that gives the results their strength.

The fact that the present series of investigations was designed to address the well-founded concerns of Hawley does not, of course, suggest that no design limitations were present. Examining the trainees of a single program, for example, and then only after an interval of three years, naturally constrains the generalizability of findings and leaves some questions, such as first-year efficacy, unaddressed. Nevertheless, two circumstances make it possible to arrive at important conclusions about alternative certification on the basis of these results. The first is the care that was taken to systematically account for notable past difficulties with research. The other was the logical progression used to plan. the second and third studies, in order to extend and clarify the results.

Taken in total, the results of Study One, dealing with observable differences in classroom teaching behaviors) Study Two, dealing with achievement test score performance of students; and Study Three, dealing with qualitative differences in the perceptions of teachers, must be construed as supporting the conclusion that there are no major differences after three years of experience and mentoring between AC and TC teachers. These studies should not be construed to indicate that there is no price to be paid by students along the way as their teachers gain experience. It should clearly be noted that the results of the studies were drawn at the end of three years of practice. There is no solace in these results for the "quick fix experts" who believe that anyone with a bachelor's degree can be placed in a classroom and expect to be equally as successful as those having completed traditional education programs. Because of the political rhetoric surrounding AC and TC programs, it is important for the findings to be interpreted in this light.

What can clearly be said is that there do not appear to be observable teaching behavior differences, or student output differences, or attitudinal differences concerning perceptions of competence of people trained under the two conditions after three years. It is possible, of course, that other indicators might have revealed differences between the two groups of teachers compared in these studies. Student behaviors, for example, might have been examined with respect to library use, cooperative group work, engaged time, and many other potential impact measures. Teacher behaviors might have been more broadly indexed to include professional memberships, integration into the school culture, emergent philosophical orientations, and any number of other conceivable outcomes. While interesting, such possibilities seem less central to the principal issues involving issues addressed by the outcomes examined in the present systematic series of investigations. It is reasonable to infer that carefully constructed induction programs may be a good means of including a broader, more diverse teaching population than limiting all avenues of entrance to the profession through TC preparation. In essence, the three studies reported here can be interpreted as supportive of carefully constructed AC programs with extensive mentoring components, post-graduation training, regular inservice classes, and ongoing university supervision.

In conclusion, rather than attempting to construe the data here presented as supportive of beginning practice without formal pedagogical training, perhaps the most constructive possible interpretation would be examining the relevance of the induction program presented to AC teachers as a model for all beginning professionals. The validity of extensive mentoring with peer professionals, continued university support, and specifically constructed inservice classes during the first three years of preparation may be a model that would enhance the teaching abilities of all. Rather than construing these results as supporting a means of diminishing potential differences, it may be more appropriate to envision a comprehensive induction model which provides a baseline of support for those entering service through AC routes and enrichment (or even remediation) for those entering via TC programs.

A further caveat involves the applicability of the AC approach described here to international contexts. At a minimum this AC program requires (1) the availability of teacher trainers to conduct, monitor, and oversee the program and (2) the presence of effective mentors. Where these prerequisites can be met, it appears likely that this program has the potential to afford governments in a variety of geographic settings and levels of development an effective alternative to the traditional preparation of good teachers. Key elements of the AC program investigated here can be summarized as follows:

1. intensive, focused coursework prior to classroom experience.
2. an initial year of teaching marked by additional coursework and by mentoring from both school and university personnel.
3. continuation of a mentoring relationship with school personnel.

It is not difficult to envision adaptations of this AC program to fit the approaches described earlier. For example, some countries, like Japan, already have AC programs that are delivered through universities. Such programs might be reexamined in order to take advantage of what has been learned from the present series of studies. In other places, such as Sri Lanka and South Africa, distance arrangements (electronic and conventional) could accommodate continued mentoring. It also seems reasonable that the AC program described here could be used as a blueprint for the kind of districtoperated AC programs currently found in the UK. Our suspicion is that the "active ingredients" of the AC program investigated here are not dependent on a particular setting or culture but can be replicated under diverse circumstances as long as thoughtful coursework is coupled with the extended availability of professional support.

References

Adelman, N.E. (1986). An exploratory study of teacher alternative certification and retraining programs (U.S. Department of Education, Data Analysis Support Center, Contract No. 300-85-0103). Washington, DC: Policy Studies Associates.

Amaragunasekara, S.D.L. (1992), November). Teacher Education at a Distance in Sri Lanka. Paper presented at the World Conference of the 16th International Council for Distance Education. (ERIC Document Reproduction Service No ED 361 321)

Barnes, S., Salmon, J., & Wale, W. (1989, March). Alternative teacher certification in Texas. Paper presented at the meeting of the American Educational Research Association, San Francisco. (ERIC Document Reproduction Service No. 307 316)

Berry, *B. (1988). Labor Market Choices* and Teacher Reform: Policy Options for the Public Schools of the Twenty-first Century. Teaching and Teacher Education 4 (1), -81.

Chiang, L.H. & Green, J.E. (1995). A Comparison of Teacher Education Reform in Two Nations: The Republic of China and the U.S.A. Action in Teacher Education 17(2), 47-54.

Darling-Hammond, L. (1992). Teaching and knowledge: Policy issues posed by alternate certification for teachers. In W.D. Hawley (Ed.), The alternative certification of teachers (Teacher Education Monograph No. 14, pp. 123-154). Washington, DC: ERIC Clearinghouse on Teacher Education.

Darling-Hammond, L., & Cobb, V.L. (Eds). (1995). Teacher Preparation and Professional Development in APEC Members: A Comparative Study. Washington, D.C.: U.S. Department of Education

Denton, J.J., & Peters, W.H. (1988, September). Program assessment report: Curriculum evaluation of a non-traditional program for certifying teachers. College Station, TX: Texas A & M University. (ERIC Document Reproduction Service No. 300 361)

EURYDICE European Unit. (1995). In-Service Training of Teachers in the European Union and the EFTA/EEA Countries ". (Report No. D/1995/4008/2). Brussels, Belgium: author. (ERIC Document Reproduction Service No. ED 390816)

Dewalt, M., & Ball, D.W. (1987). Some effects of training on the competence of beginning teachers. Journal of Educational Research 80 343347.

Etheridge, C.P., Butler, E.D., Etheridge, G.W., & James, T. (1988, February). The effects of type of teacher preparation program on internships in secondary schools. Paper presented at the meeting of the American Association of Colleges for Teacher Education, New Orleans. (ERIC Document Reproduction Service No. 293 807)

Feiman-Nemser, S., & Parker, M.B. (1990). Making subject matter part of the conversation or helping beginning teachers learn to teach. East Lansing, MI: National Center for Research on Teacher Education.

Galvin, C. (1996). A Promotion of Teacher Professionally: Higher Education and Inital Teacher Education in England and Wales. Studies in Higher Education 21(1), 81-92.

Gomez, D.L., & Grobe, R.P. (1990, April). Three years of alternative certification in Dallas: Where are we? Paper presented at the meeting of the American Educational Research Association, Boston.

Grossman, P.L. (1989). A study in contrast: Sources of pedagogical content knowledge for secondary English teachers. Journal of Teacher Education. 40 (5), 24-31.

Guyton, E., Fox, M.C., & Sisk, K.A. (1991). Comparison of teaching attitudes, teacher efficacy, and teacher performance of first year teachers prepared by alternative and traditional teacher education programs. Action in Teacher Education. 13 (2), 1-9.

Hawk, P.P. & Schmidt, M.W. (1989). Teacher preparation: A comparison of traditional and alternative programs. Journal of Teacher Education. 40 (5), 53-58.

Hawley, W.D. (1990). The theory and practice of alternative certification: Implications for the improvement of teaching. Peabody Journal of Education. 67 (3), 3-34.

Hawley, W.D., & Rosenholtz, S. (1984). Good schools: What research says about improving student achievement. Peabody Journal of Education 61(4), 178.

Haydn, T. & Hake, C. (1995). A Bridge Too Far? Teacher Training in England and Wales. International Journal of Educational Reform 4 (2), 172-177.

Hunter, M., & Russell, D. (1977). How can I plan more effective lessons? Instructor, 87 (2), 74-75, 88.

Hutton, J.B. (1987). Alternative teacher certification: Its policy implications for classroom and personnel practice. Austin, TX: University of Texas. (ERIC Document Reproduction Service No. 286 264)

McDiarmid, G.W., & Wilson, S.M. (1991). An exploration of the subject matter knowledge of alternate route teachers: Can we assume they know their subject? Journal of Teacher Education 42(2), 93-103.

McDonard, R. (1995). Teaching Practice at the University of South Africa: A Special Type of Field Experience. Action in Teacher Education, 17(2), 76-80.

McKibbin, M.D. (1995, April). A longitudinal study of the effectiveness of district intern alternative certification programs in California. Paper presented at the meeting of the American Educational Research Association, San Francisco.

McKibbin, M., & Ray, L. (1994). A guide for alternative certification program improvement. The Educational Forum 58, 201-208.

Miller, J.W., & McKenna, M.C. (1988, April). Effects of a training program on the ability to observe and analyze instruction. Paper presented at the meeting of the American Educational Research Association, New Orleans.

Miller, J.W., McKenna, M.C., & Davison, R.G. (1990, April). The relationship of observational notes to the quality of post-observation teacher conferences. Paper presented at the meeting of the American Education Research Association, Boston.

Miller, J.W., McKenna, M.C., & Harris, B. (1989, March). The utility of differing scripting strategies in evaluating teaching performance. Paper presented at the meeting of the American Educational Research Association, San Francisco.

Mishima, P. (1987) The California teacher trainee program: A review. Sacramento, CA: California State Office of the Legislative Analyst. (ERIC Document Reproduction Service No. 293 801)

Mitchell, N. (1987). Interim evaluation report of the alternative certification program (REAB7-027-2). Dallas: DISD Department of Planning, Evaluation and Testing.

Rosenshine, B.V. (1986). Synthesis of research on explicit teaching. Educational Leadership, 43(7), 60-69.

Shimahara, N.K. & Sakai, A. (1995). Learning to Teach in Two Cultures. New York, NY: Garland Publishing, Inc.

Soares, L.M. (1989, February). Correlates of self-attribution and competency of liberal arts graduates in teacher training programs. Paper presented at the annual meeting of the Eastern Educational Research Association, Savannah, GA. (ERIC Document Reproduction Service No. 304 408)

Soares, L.M. (1990, April). Comparisons of student teachers and alternative route candidates. Paper presented at the meeting of the American Educational Research Association, Boston.

Stafford, D., & Barrow, G. (1994). Houston's alternative certification program. The Educational Forum, 58, 193-200.

Wale, W.M., & Irons, E.J. (1990, April). An evaluative study of Texas alternative certification programs. Paper presented at the meeting of the American Educational Research Association, Boston.

PREPARING TEACHERS TO RESTRUCTURE SCHOOLS IN BOTSWANA

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Tasks and Resources to Be Restructured

If a of study preservice teacher education in Botswana were to subsume nine parameters namely ideology, student teachers, lecturers, content, location, time, ethos, regulations, finances, we might find that the spotlight falls on the second, third and fourth as variables that are most in need of restructuring.

With due thanks to a benevolent diamond industry the nation has provided the necessary infrastructure for teacher education at the University and at colleges of Secondary Education. As teacher educators we note with a degree of felicity the proliferation of modern Community Junior Secondary Schools which are indicators of the nations commitment to the provision of ten years basic education. Not only are these schools valuable for student teachers field experience but they are the places where they are eventually going to teach and therefore the very reason why student teachers and the content they learn needs restructuring. The need is to engender efficacious skills and dispositions among student teachers.

Teacher education consists of the sets of events and activities which are deliberately intended to assist candidates to acquire the skills, dispositions, knowledge, values, habits, norms etc. which will enable them to enter the profession of teaching.

Currently, the degree to which student teachers acquire any of these skills is not apparent to the naked eye, there is no area of teaching and learning where it explicitly manifests itself. Thus it can be argued with a reasonable degree of validity that the content of preservice teacher education in Botswana needs to be reconstructed.

Most teacher educators in our Colleges engage in vertical transmission of knowledge as opposed to horizontal transmission of knowledge, that is the telling methods predominate any attempts at information processing. Teaching and its pace are regulated by excessive continuous assessment and examinations. As a consequence learning to learn, a very important aspect of educational processing is often given scant attention in the pursuit of examinations.

Preoccupation with the giving of tests and recording marks gives the semblance of continuity and growth by student teachers but on the contrary it is a series of interruptions which not only hamper intellectual and professional growth in the teacher but also culminate in a quantitative accumulation of marks most of which are totally unrelated to any change in the student teacher at all.

It is therefore axiomatic that either by an attitudinal revolution or by intellectual vitality and curiosity teacher educators in our colleges should shift their perspectives towards formulating a programme that radically departs from the present practice to one which is essentially oriented and committed to the provision of the sets of events and activities which are targeted at changing student teachers into true intellectual transformatives.

There is a special way in which a shift in viewpoint, attitudes and practice by teacher educator will influence student teachers to respond to a more meaningful and empowering form of content, and it is mainly because the latter are expecting the former to set direction, to offer guidance and to monitor standards in the acquisition of skills, knowledge and dispositions.

The setting of direction by college administration is also called for. Far from interference with academic freedom this should be seen as an unobtrusive form of instructional leadership which can be done by a leadership team which has the aptitude and acumen for it. Vail (1983) discusses the importance of "purposing" which he describes as "that continuous stream of information by an organizations formal leadership which has the effect of inducing clarity, consensus and commitment regarding the organisations basic purposes."

The modus operandi in our Colleges of Education is always inherited from some distant time and as though we want to be on a safe side it is rarely subjected to scrutiny. We expend much funds on self-study but there is not much visible change resulting. Part of the problem comes from the large turnover of teacher educators which means that new lecturers often come in the middle of a self-study while others leave even before plans are implemented.

Effective teacher education in our colleges requires collegiality which refers to the readiness or maturity by lecturers to share work, and pedagogical vitality which implies continuous teacher educator self improvement in instructional practice.

At the Education For All In Botswana Conference held in Gaborone in April 1991 Mr Rathedi in his paper on Teacher Education in Botswana noted with concern the then too low entry standards for primary teacher education. There has been a dramatic change since then. Minimum entry requirements for primary teacher education are now at par with those for secondary teacher education and both teachers study for three year Diploma Courses.

In his paper he strongly alluded to the need for the colleges to empower student teachers. In his words "we need capable teachers who feel proud and challenged by their profession. We need teachers who can perceive and transmit to the children what is of value in the current society." The key words in his statement are the need for empowered teachers who are effective and have acquired skills, knowledge, values etc. which they can transmit to children in the schools.

At the same conference F. Youngman summed up by pointing out that the conference proposals take into consideration the factors that impact on quality in education such as the calibre of the teaching force, the availability of educational materials' the adequacy of physical facilities and the management practices of the school heads.

Not much can be said by me about the second, third and fourth factors though their availability, adequacy, and effectiveness respectively can be a sine quanon to teacher support I am satisfied that the standard of infrastructure especially at Colleges of Education, Community Junior Secondary Schools is comparable with the very best in the region.

The factor that is most central to my concern is the calibre of the teaching force which stands out as the flagship among variables that impinge on the quality of education in Botswana.

In a paper on research in Botswana by Sheldon G. Weeks (1991) he noted the tendency of educational research to focus only on the educational system and neglect to seek the linkages between education and opportunity. He cited studies of the teaching profession where taking into account the preservice and inservice training of female teachers is rare.

The worth of the above suggestion on the need for interfaces between education and opportunity does not seem very useful to me under the present circumstances because despite the wide democratisation of education in Botswana there is consensus that standards have fallen and continue to fall there so there is a compelling and pertinent need to shift the balance away from issues on equity to those of quality. There is need to reconceptualise and restructure the professionalisation of teachers particularly at preservice level.

There has been a steady spate of classroom research at primary and secondary schools in Botswana for example by Mamwenda and Mamwenda 1989, who underscored factors related to high academic attainment and studied qualities of teachers at the primary level. They are reported to have discovered that students taught by female teachers, especially with longer experience clearly outperformed those taught by their male counterparts Kann 1990 analysed Junior Certificate results and concluded that girls are underperforming to a remarkable degree in the community junior secondary school system. Taole (1991) compared girls and boys in science and found a remarkable gap in favour of boys. Gaynor (1990) indicated that women suffer from preservice teacher education courses which are structured in "male-friendly" manner. He argued that there is a lack of gender awareness in the Colleges of Education in Botswana.

A conviction garnered by me from experience in teacher education is that Batswana student teachers do not speak their own language any better than they do the English Language. Therefore one of the tasks that these students should be helped to grow in as teachers is that of proficiency in communication skills.

Research by Rowell (1991) and Prophet (1991) in relation to language proficiency have contrasted the acquisition of information with that of meaningful knowledge processing by the student. The stated aims of the new English programme were to develop the students communication skills in various situations. She concluded that the communicative framework for encouraging cognitive engagement is impoverished by the style of interaction in many of the classrooms observed in the study. In a similar vein Prophet (1991) stresses the continuing inhibited nature of verbal interactions and uses the piloting of a new curriculum innovation in English to underscore problems confronting curriculum implementers. He notes as problem areas, the perceived effect of the new programme on the quality of teacher work-life, the rather negative attitude of many teachers towards students in the CJSS (may be out of Grade D inclusion), visible unwillingness of the students themselves to play a more active verbal role in the classroom.

Fuller and Snyder (1991) used a classroom observation schedule in a large number of primary and secondary schools in an attempt to quantify teaching skills and the use of school textbooks in teaching. They found the plurality of teachers "lecturing at" students with the student seldom seen used in class. By correlating effective teacher behaviours with the level of teacher education Chapman and Snyder (1989) concluded that differing levels of training appeared to have little effect on teaching behaviour or eventually on student attainment.

Much classroom research has been carried out in the schools in Botswana, Major features of the teacher education process have not been scrutinised by the research community; the preservice teacher education curriculum, the effectiveness of the commitment to teaching practice, the teacher educators themselves, and co-ordination between the various teacher education institutions and the Department of Teacher Training and Development.

On the basis of information gleaned from the above literature review and using inferences from the rhetoric of reform that the amount of research cited above amounts to, I will venture to explore alternatives. I intend to engage in a critical enquiry informed by a comparative and attainable global perspective. First I will address the role of commitment.

The role of commitment

In Botswana we require teachers who are committed to their work as intellectual transformatives. A focus on the Community Junior Secondary Schools (CJSS) will be used by me to delineate a number of desiderata that are pertinent to this sector of this education system.

CJSS children have to learn skills that visibly transform them in a meaningful way. They have to acquire physical, intellectual skills and personal qualities. They have to be helped to develop intellectual curiosity to ask questions and to communicate clearly and fluently. Children at this level should grow in levels of cognition. There should be a visible or palpable difference between their entry behaviours and exit behaviours. The change and intellectual maturity in these children as they graduate to Senior Secondary level should not be assumed or merely implicit but rather explicit and readily detectable.

Current written work by most pupils in these schools teems with syntactical solecisms and the handwriting is generally atrocious.

In light of the new three-year Junior Certificate proficiency in written and spoken language and handwriting skills should permeate the whole instructional programme and pupils should be helped to grow in the acquisition of these skills.

Lessons learned from Effective Schools literature in the USA enable us in Botswana to look at our own version of effective schools and determine the factors that make those schools effective with a view to doing what they do and hopefully to become effective as well. But first lets consider the factors from this literature. These are (a) Strong instructional leadership. (b) Clear instructional focus. (c) High expectations and standards. (d) Safe and orderly climate. (e) Frequent monitoring of student achievement.

The role of commitment in preservice teacher education in Botswana, in keeping with the first school effectiveness factor requires that the formal organization of our institutions should continually clarify the purpose of their programmes. The principals should themselves envision what changes are required and mobilise all available resources human, physical and fiscal to get these changes done. Effective principals for our Colleges should have a singular boost to ascertain bottomline mastery of the events and activities which are geared to educating committed teachers for our secondary schools.

It would make precious lime sense for the leadership if they did not share their vision of change with the staff and students. A clear instructional focus which is shared by all in the College is extant when teacher educators and other adults in the institution can describe the shared mission. This will help teacher educators to make daily decisions on what student teachers learn and how the material is to be presented. Focus is all about clarity of understanding and derives its effectiveness from is sustainability.

High expectations and standards refers to an unrelenting belief by teacher educators that student teachers can perform to the best of their capacities as long as they can sense support and confidence of their teachers for them. In the look book Pygmalion in the classroom Rosenthal and Jacolsen suggest that one persons expectation for another persons behaviour can quite unwittingly become a more accurate prediction simply for its having been made.

The power of high expectations and standards as a means of bringing out an enthusiasm for commitment to teaching by teacher educators and for learning by student teachers lies in the continuous transmission of feedback.

Similarly a safe and orderly climate is one of the major desiderata for our teacher education institutions in Botswana as James Sweeny (1988) suggests "when a school has a winning climate, people feel proud, connected and committed. They support, help and care for each other. When the climate is right there is a certain joy in coming to school either to teach or to learn.

The implications of cultivating a safe and orderly climate in teacher education in Botswana are that by the way they are treated student teachers will know what the staff value and a learning atmosphere and ambience may be engendered within institutional contexts of the highest quality. But our colleges will only get that way when the general ethos is one in which all students can learn. When students sense that teacher educators are committed to the enhancement of academic performance, and that high expectations and standards are communicated regularly this will have the effect of inducing the understanding, general agreement and dedication necessary to carry the programme forward on the road to excellence.

The present situation in our colleges is that there is frequent monitoring of progress and this is in keeping with effective schools practice as far as the frequency goes. However the nature of the monitoring is that it is based on the recall level and therefore it lacks in depth of cognition. The existing monitoring is wrongly focused on factual knowledge alone and scarcely on the events and activities that constitute teacher education namely the skills, values, dispositions, knowledge, habits and norms which help to socialise them into teaching as a career.

Lastly parental involvement should be encouraged as parents are valid stake-holders who can act as the glue that provides the cohesion that is necfor collective commitment to learning. They are the significant others who provide student teachers with the extrinsic motivation to strive for excellence.

The centrepiece of our curriculum in the colleges should be the acquisition of knowledge both academic and professional that is content and methodology. Efforts should be made by teacher educators to commit the processing of knowledge to habitual integration. Strategies and alternatives should continually be explored to help student teachers bridge the gap between theory and practice.

When student teachers regularly engage in debates and dialectical interactions over the matter of teaching then patterns of understanding may develop in them which help them to acquire a repertoire of skills which can grow with time and practice.

It follows then that the teacher education classroom should often be like a cauldron of competing ideas. In keeping with social learning theory the student teachers can benefit from the free-market of ideas that can emanate from classroom discussion setups that enable them to explore alternatives for more effective ways of teaching children. The most crucial ingredient in the approach is the pattern of understanding and skill proficiency that may begin to unfold and crystallise in student teachers as they continue in the habit of meaningful engagement in dialectical interactions.

There may well be a form of reciprocal determinism here when such discussions over theory and practice become not only the modus operandi of the student teachers but also the modus vivendi.

The role of the teacher educator in helping to induce this commitment to lively and regular educational processing by students teachers is to formulate or contrive situations that can stimulate or trigger their curiosity so that there will be a continuous enthusiasm for useful debate.

More relevant sources that can help student teachers to grow in pedagogical knowledge are those of the classroom as an entity within the school and also the classroom as a microcosm of society. While educational psychology may assist students

1008

understand children and the ways they interact and learn in classrooms social psychology, and may be more so, help student teachers to see the child's learning behaviour and problems against a background of society.

Commitment depends on the continuous flow of information by teacher educators and other adults to encourage clarity consensus and dedication to professional growth.

Empowerment of Student Teachers in Botswana

One way to empower student teachers in our teacher education colleges is to structure the programmes in such a way that the candidates can be encouraged to explore their experiences, interests and values with a view to creating new knowledge. Curriculum must be opened up to enable student teachers to develop knowledge from their own lives and bring it to their pupils.

Another way of helping student teachers to appreciate their deeply held interests and knowledge is to provide ambiance for them to examine the question 'what do people like me, my peers know?' The programme should provide time for pairs or groups of student teachers to engage in dialectical interactions together. This means they can pair up in a series of conferences appraise each others values, knowledge and beliefs about children, the curriculum and teaching. Discussions can be recorded both on paper and tape and extracts should be brought to the final seminar.

The conference must aim to close the gap between envisaged and existing values They can adopt a bipolar mode in which similarities and differences are considered. For instance how similar are the experiences, knowledge, interests, values which peers possess and how do they vary and why. Using principles derived from social psychology student teachers can examine whether or not human beings have a natural propensity for learning; whether or not learners have needs, goals and purposes, which are an important reinforcement; whether or not significant learning takes place when the learner chooses what he wants to learn and when he wants to learn it, whether or not learning is rarely an isolated activity, whether or not significant learning only takes place in a non-threatening environment.

When students engage in a bipolar mode in their discussions of such principles they are enabled to discover both potential or inconsistency in any of them and to explore alternatives on the basis of some of these principles and those that are discovered or reformulated by them to suit their circumstance.

A third mode to employ in the empowerment of student teachers is to enable them to investigate the question "what do children know?" When we begin to recognise children as knowledgeable, industrious, interpreting and wholly human then we can see ourselves in a new and unveiling light. The psychology of the behaviourists holds that children are empty tins, their actions are explained in action verbs. These views hinder more effective interaction between student teachers and children.

The behaviourist scheme hides from the student teachers the power of their relationship with children. It beclouds the teachers daily reflexivity and thinking. To make matters worse this scheme belittles children into mechanisms incapable of processing knowledge, making decisions or choices to change their ways of acting.

The challenge facing teacher educators is to offer student-teachers opportunities to appraise critically their conceptual schemes and the consequences of their beliefs, while presenting alternative ways to perceive children as active not merely reactive organisms.

In keeping with Gregory Batesons warning that to focus on one spot in the web is to miss the nature of its interconnectedness I will shift attention from the individual child to a much more ecological viewpoint. At a certain stage in the course preferably early enough, students, children and teacher educators can come to know what they know and to subject to scrutiny what they know with regard to values, beliefs and choices.

Student teachers in the programme can focus on one child but do so within a classroom group in which they play an interactive role. The teacher and the classroom setting should not be taken for granted as "inevitable realities" but they should be periodically assessed and explicated. put on the spotlight to be assessed and explicated.

The student teachers can engage in participant observation so that they can see child growth and development partially as a function of what they themselves do and experience not merely as professionals but as persons.

Children possess knowledge. Student teachers should explore ways to reach that knowledge. They should learn how to interview children by an instrument such as Piagets clinical design. this involves a method which indicates a progressively improved diagnostic method of making inferences about intellectual development. It is not simply observation of behaviour or discussion of internal feelings but a method of inference which looks for any kind of "symptom" of action or spoken word which may reveal how the child is thinking.

Students should draw on their own observations, their verbal interactions and their plays with the children so that they can come to perceive themselves as collectors of useful data.

In the schools during teaching practice, the students sometimes work with teachers who devalue their own knowledge and adhere to the rigid structure of a set curriculum, The challenge of teacher educators is to empower both the cooperating teacher and the student.

They can do this by engaging in dialogue with the teacher and avoiding as much as possible the ritualistic scripts and listening more intently to his view so that jointly they may develop the most ideal learning experience for students.

Some students are already dedicated to empowerment by the time they are admitted to college. The programme should reaffirm the beliefs and values of these students and perhaps include teacher educators and the peers of the students to offer broader choices and opportunities for acting upon them.

The recent Foundations of Education textbook writers workshop whichdrew participants from colleges and Universities in Botswana, Lesotho, Swaziland, Namibia and Zimbabwe and was held in Gaborone Botswana sought to identify the typical Botswana and Southern African aspects of school life from which educational theory could be distilled. In an attempt to discover the use of case study material the text would provide the student-teacher with opportunities to analyse the elements of school situations and to use these to formulate theoretical perspectives. These would then be reinforced by an analysis of existing theory in order to ensure that student teachers appreciate the relevance of theory to classroom practice.

The formulation of educational theory from cultural aspects of school life can be a very empowering approach to use in our programmes in as far as it provides the use of case studies which are analysed to understand the formalised plan of the school and extract its goals, objectives and desired outcomes that is the instructional system of the school. The analysis can cross over into the learning milieu which denotes the social-psychological psychological and material environment in which students and teachers work together.

I personally have reservations about when exactly in the exploration of educational theory by student teachers should extant theory be examined. I believe that student teachers should not be made to discover what is already known about children and learning. Student teacher empowerment should be seen as a means of inducing learning by shifting perspectives. The discovery which is central to my concern is that which comprises variables that are either different or new, because such findings will enable something near to a regression analysis.

For example if theory from gestalt psychology advised the student teacher to convey the concept of area in mathematics as "surface to be covered" rather than as "length times breadth" and from their classroom observations they discover a better or worse approach they will be having something against to compare the new finding. However they will be spared having to find the already known instead of being empowered to employ ways of exploring alternatives to the known and to learn the unknown by a process of shifting perspectives.

Jean Piaget has shown that right from the beginning we shift our viewpoints in ways that expand our horizons. Two-year-olds live in a world of touching and movement awareness all centred on their own bodies. But Piaget states that "at about one and a half years through a shift of viewpoint which he called "decentration" truly equal to the idea of gravity, space changes into one homogeneous crucible in which all objects are placed including ones own body". Another emancipation and major change in viewpoint comes about when a child realises that his brother has a brother and it is he. The sphere of social relations grows and widens up. People of all ages struggle all their lives to shift perspectives in order to gain wider worlds.

Piaget also explains that in the fight for emancipating perspectives we move backwards as well as forward. We do not acquire new knowledge merely by additions but by reconstruction of previously held viewpoints. These changes can be turbulent and uncoordinating and can cause us to revert to safer ground for a while. Paulo Freire encourages us towards the fight in a similar way when he says that "education is a permanent act of cognition ----------------- it means making a new effort in a new situation in which new aspects which were not clear before are clearly presented to the educators.

In teacher education in Botswana this can be interpreted to mean that the cooperating teachers in the schools, the student teachers and the teacher educators must be ready to talk together and be ready for the backward and forward movement that is inevitably part of a valuable shift of viewpoint.

The Role of Reflection in Preservice Teacher Education in Botswana

I believe that a student teacher who as a consequence of being involved and immersed in his/her own professional development becomes committed to growth in it and is empowered by shifting perspectives to create new knowledge will be well on the take-off to self-sustained growth. Student teachers have the pending task of making curriculum intelligible to children. They can learn to do this in an unreflective manner in a traditional way that is totally oblivious of contextual factors. The unreflective teacher teaches as someone who either has no conscience or is neglecting to use it. On the other hand they can learn to be reflective teachers and develop a disposition for habitual reflection during lesson delivery.

To reflect is to muse upon something and the dictionary defines the word muse as 'to think in a deep and concentrated way, ignoring what is happening around one.' The traditional approach hinders the self-directed growth of student teachers and thus fails to enhance their full professional growth. We require programmes that are essentially oriented toward the goals of reflective teaching and greater teacher antonym.

The role of college students in professional programmes requires students to consciously reflect upon the process of learning as they go through it. It is this awareness of knowing how they learned that is the basis of their ability to guide children.

The preservice preparation of teachers who are both willing and able to reflect on the origins, purposes and consequences of their actions as well as on the material and instructional system constraints is highly desirable.

These goals aim to facilitate in student teachers the development of pedagogical habits and skills necessary for self-directed growth and toward preparing them individually and collectively to participate as full partners in the making of educational policies.

The underlying metaphor provided by these goals is that of emancipation. An emancipated person according to Siegel (1980) is one who is free from the unwarranted control of unjustified beliefs, unsupportable attitudes, and paucity of abilities which can prevent that person from completely taking charge of his or her own life.

Teacher education programme should help candidates undergo and process of attitudinal revolution, a shift in view-points and beliefs and help them understand the psychological consequences of perceived causality which are highly prevalent in our culture. I believe that these can be demystified through discussion and reflection and the end result may be a freed teacher.

The implications for whether or not the learning atmosphere of the institution is supportive and caring is important here.

I believe that the ideal teacher is one who is reflective, deliberative and collaborative. These three words subsume a large number of behaviours and values, they provide a disposition and readiness to doing the work of teaching as well as ensuring that the readiness happens.

The reflective teacher is one who takes sincerely the need to think deeply, carefully and systematically about his or her actions, knowledge and viewpoints to provide learning opportunities to pupils. The reflective teacher is someone who views pupil behaviour in relation to teacher behaviour and not as an unrelated entity that somehow exists outside the teachers tether of influence. The reflective teacher uses information from a variety of sources to muse about teaching and learning and schooling. He or she is effective, aware of subtle as well as dramatic shifts in student attention, classroom atmosphere and responsiveness to instructional materials. Such a teacher is also conscious of the cultural values and beliefs in the local community and the broader society, and the public and private needs for knowledge and skill required by students. He or she collects information and uses it.

The reflection on the information can be immediate as in the case of abandoning a preset lesson on "Magnets" when an unusually heavy storm leaves the school grounds awash with water. Similarly the teacher reflects on an accumulation of information about events, test scores, student responsiveness and the like so that he or she can make crinstructional decisions based on personal professional knowledge rather than on an impersonal prescribed curriculum.

The teacher who is deliberative will reliably use the results of reflection. The deliberative teacher understands the underlying relationship between acumen, the requirements of the schooling situation and the nature of teaching and the characteristics of students in the classroom. The outcomes of a deliberative disposition about teaching can be seen in many effective classrooms in Botswana as teachers work alone or together to "make the best of a bad lot" or to make more positive classrooms that are already satisfying learning places. This may take the form of a new piece of curriculum, the discovery of additional resources to support learning, or the careful thinking out of especially relevant ways to reward student performance. The point being discussed here is the truism that rarely does any professional deserve professional status by only preserving what is. Almost by definition, a professional is one who moves the profession forward. This is the outcome of deliberation and reflection.

In most schools collaborative behaviour on the part of teachers and administrators is prevented by the physical and organisational structures. Teachers are isolated from one another by classroom walls, timetables, restricted or non-existent opportunities to interact around issues of teaching and learning and they are often reduced to the level of servants of bureaucratic policies and procedures. Yet, quite clearly the most effective schools and the most effective teachers are characterised by a high level of interaction and collaboration not just in terms of personal regard for one another on social occasions but also in terms of professional activity. This activity is based upon the best means to cooperate towards attaining the important outcomes of schooling. Teachers who collaborate are teachers who share their best frustrations, who concentrate on developing shared understandings and values, and who keep at a distance or to a minimum constraints to working interactively.

Reflection, deliberation and collaboration should all three be cultivated and nurtured during preservice teacher education. The grounding in these qualities needs to be so effective and generic that growth in them will form a pattern whose refinement can be inexhaustible in possibilities.

Student teachers should gradually learn to reflect on the idea of the teacher as a knowledgeable person. In effective programmes of teacher education students have a sequence of direct experiences; observation, short periods with small groups of varying ages, tutoring of individuals, student teaching for an extended period in the room of a master teacher and finally serving as an intern or beginning teacher with full responsibility but under regular supervision. In order for the beginning teacher to improve each year, rather than to have one year of experience repeated over and over the actual experience of teaching must itself be a learning experience.

In the idea of the teacher as a knowledgeable person the teacher is expected to teach something, namely a field of content or subject. As such a teacher should have mastery of the subject-matter to include (a) Scope - breadth and comprehensiveness of the academic discipline: (b) depth - the level of scholarly quality particularly in the structure and tools of the discipline and how its knowledge is produced and tested. (c) coherence - the degree to which the teacher can reconstruct the conceptual structure and organisation of knowledge from a programme of study; preparation in related subject areas from his or her general education. It is highly inconceivable that neophyte teachers can demonstrate this degree of knowledgeability unless they have learned to create and to reflect on subject matter as a matter of habit in their preservice teacher education.

Through clinical situations student teachers should learn delivery of lessons and reflect and deliberate on performance and collaborate in the evaluation and suggestion of alternative approaches. Piagets Plearning for P. learning and LM learning which stands for logico mathematical learning should be reflected upon by student teachers and employed on trial basis by them. Physical learning is behaviourist implying learning that is influenced from outside and Logico-mathematical learning is cognitive and implies learning by reasoning.

Student teachers should learn mathemagenic behaviours if they are to be able to control classroom instruction and to effectively enhance learning. The term mathemagenic comes from the Greek mathema "that which is learned" and gignesthesia, "to be born" (Ropkopf 1965' 1970). Mathemagenic behaviours are those that generate learning. The stimulus provided in a book or lecture may be considered as the "nominal" stimulus that is provided by the teacher. The "effective" stimulus is what the student is actually processing; In one sense we can look at mathemagenic behaviours as ways to make the nominal stimulus the effective stimulus. If the student is processing what he or she is reading or listening to, then the nominal and the effective stimuli are highly similar. To ensure this similarity student teachers can learn to use mathemagenic behaviours such as recitation, physical activity, overlearning, mnemonic devices (i) imagery, (ii) the method of loci (iii) the keyword method.

Another very important aspect of educational processing which is often taken for granted by both student teachers and teacher educators is assessment. Next we will consider its relative importance to teacher education in Botswana.

The Role of Assessment and Student Support

Assessment has always been and continues to be at the forefront of educational activities in Botswana. Both selections for further education and for employment are based on examination results.

Because teachers receive test information from their colleagues within the schools and from agencies outside the schools, they need a working proficiency in important aspects of testing.

A test "may be thought of as a set of tasks or questions intended to elicit particular types of behaviours when presented under standardised conditions and to yield scores that have desirable psychometric properties," the American Educational Research Association (AERA), the American Psychological Association (APA), and the National Council on Measurement in Education (NCME) (1974) p.2). Testing then means posing a special set of questions to a person or group of persons in order to derive a score. That score concludes the testing.

Assessment is the process of collecting data for the purposes of making decisions about students. If teachers make important decisions about students and about their teaching it is only reasonable that the information they use to make these decisions should be of high quality. Measurement and evaluation specialists use a set of technical terms to denote the quality of assessment information, reliability and validity. A test is said to be reliable when it provides stable, consistent scores for individuals who take it more than once over a length of time. A test is said to be valid when it measures what it claims to measure.

It has been said that one of the best ways to evaluate teachers is to scrutinies the tests they give to students. Good teaching and good testing go in tandem. This is so because well-developed tests can be the cardinal motivator and provide direction to student learning to, appraise how well students are achieving learning objectives and to assess how well teaching is done.

Few teachers in Botswana have been asked to construct a complete test (using a test blueprint) trial out the test with students and modify it following an analysis of student answers. Furthermore, some teachers postpone test development to the last minute: constructing a test haphazardly and without reference to instructional objectives will certainly fail to motivate and guide student learning.

It is the case that these common mistakes are prevalent in the colleges of education. some of us ask too many low level ques. Others derive test items from textbook publishers test booklets, unaware that these items may not be content valid items for what is going on in the classroom.

Student teachers in preservice teacher education should be exposed to and grounded in the use of the six levels of cognition. These levels are Knowledge, comprehension, application analysis, synthesis and evaluation. In order to clarify the six levels and their relevance to learning objectives they will be briefly discussed below.

Knowledge, an objective written at this level requires students to regurgitate information in more or less the same way as it was. Action verbs used in objectives written at this level include: define, identify, label, name, recall, recite, recognise, select and state.

Comprehension, at this level students must not merely reproduce information, they must understand it to the point of altering it in some way. Action verbs related to this level include explain, convert, generalise, interpret, and predict.

Application, objectives that want students to use a principle, rule, generalisation or strategy in an unfamiliar situation qualify as application objectives.

Action verbs associated with application objectives include: choose, compute, demonstrate, employ, implement, produce, relate, and solve.

Analysis, an analysis objective requires students to breakdown something unfamiliar into its basic parts. It also may require a focus on the relations among the parts. Words and phrases related to this level include: deduce cause and effect, diagram, distinguish,

Synthesise, Objectives written at this level require students to produce something original or unique.

Words associated with synthesis objectives include: categorise, devise, discover, formulate and invent.

Evaluation, At this level students are required to judge the quality or value of an idea, method, product, or human performance that has a specified purpose and to include reasons for their judgement.

Verbs commonly associated with this level include: appraise, assess, compare, criticise and justify.

One way to ensure that student teachers begin processing knowledge at various levels of understanding is to use the action words suggested for the formulation of objectives to guide teaching and for the construction of test items. It seems to me that the extent to which student teachers can engage in groupwork, discussions, the processing of information, to gather information about teaching and to explore alternatives in the choice of learning and teaching strategies can all the facilitated by the availability of action objectives at all levels of thinking.

Another way would be by the dedicated employment of learning-to-learn thinking skills However development of thinking skills is not an overnight achievement. Demonstrable change can only show after a two year period of stable and continued teaching that employs a carefully designed curriculum and well-trained teachers.

Another problem derives from the preoccupation with quantifiable scores. Reducing thinking to ritualistic forms of testing such as multiple choice items and having to express mental functioning through paper and pencil format and trying to standardise creative insight may be defeating in purpose and discrediting in method to teacher educators.

Thinking is not demonstrated by how many answers students know but instead by how they behave when they do not know. Keeping anecdotal records of a students acquisition of these types of behaviours provides more usable information about growth in intellectual behaviours than typical norm-referenced, multiple choice, standardised achievement tests.

Perseverance, Students often give up in despair when the answer to a problem is not evident On the contrary, thinking students grow in their ability to use alternate problem solving strategies.

Decreased impulsiveness. Students often give the first answer that comes to mind. Sometimes they scream out the responses, start to work without fully comprehending the directions or do not use plans or strategies to approach problems.

As students become less impulsive we notice a decline in the number of scratchers on their papers. They gather information and make sure they understand directions before beginning tasks, take time to reflect on answers before giving them, listen to alternative view and plan problem-solving strategies.

Among the many attributes of student teachers which may be developed in ways similar to the above factors are those related to the students understanding or conception of teaching.

Flexible thinking. Some students have difficulty considering alternate points of view or dealing with more than one classification system simultaneously.

As students become more flexible they can consider, express, or paraphrase the viewpoints or rationales of others. They can state several ways of solving the same problem and evaluate the merits and consequences of alternate courses of action.

Metacognition. This means knowledge about knowing. Some people are unaware of their own thinking processes. They are unable to describe the steps or strategies they use during problem solving, cannot transform into words the visual pictures held in their minds, and rarely evaluate the quality of their own thinking skills.

We can determine that students are becoming more aware of their own thinking as they are able to describe what goes on in their heads as they think. This is similar to propositional thinking in information processing. Gage and Berliner (1976).

It seems reasonable that student teachers understanding develops as experience, knowledge and practice accrue.

Careful review. Students are often careless when turning in their completed work. They seem less inclined to reflect on the accuracy of their work.

We can become aware of growth in students desires for accuracy as they take time to check their tests and papers and become more conscientious about precision, clarity, and perfection.

Problemsolving. One of the distinguishing characteristics between humans and other life forms in our ability to find problems.

There should be a change from teachers asking questions and posing problems to students asking questions and finding problems themselves. The teacher education programmes should provide curricula which are deliberately intended to make student teachers more aware of their thinking and help them to ask questions and find problems.

During the early years of college, the understanding of teaching may consist largely of perceptions of what activities occur in classrooms, and simple stereotypes of children and teaching situations. It seems reasonable to speculate that student teachers understanding of what teaching entails would to less finely and fully understood earlier in their careers than it becomes later on.

The distinction could be predicted to increase in such properties as levels of analysis, the conception or construction of teaching situations, attributions of the causes of children behaviour.

CONCLUSION

The shift in emphasis from teacher-centred methods and techniques of teaching to student-centred ways of learning calls for a transformation in teacher education i.e. form an emphasis on teacher skills for vertical transmission of knowledge and information to methods and techniques stressing and enabling horizontal transmission of knowledge.

Consequently current teacher education should place great emphasis on the empowerment of student teachers by inducing them to be decision-makers who can shift perspectives on the basis of reflection, deliberation and collaboration.

Current teacher education approaches and standard procedures for classroom teaching and the instructional ecology itself have become too impoverished for teaching pupils in a modern technological world. The college classroom walls commonly remain bare and barren most of the time. The college programme has to provide more clinical experiences for student teachers building up to teaching practice before qualifying as teachers. The content of teacher education programmes will have to be restructured in order to take into account the changing needs and innovations in education.

The key to better and more qualitative teacher education lies with the continued education of teacher educators that is with the educators themselves. The fact that one has a good degree and can speak well, does not mean that he can educate others to become teachers. The education of teachers requires special training skills of which many tutors in teacher education institutions do not have. Teacher educators certainly need in-service training to become more effective in their work.

The wide majority of people in Botswana are highly solicitous for change for the better in the quality of education and rightly or wrongly they believe that this change should come through a teacher education that is committed to producing teachers who are true intellectual transformatives for the local schools.

Because of the general anxiety on quality the colleges cannot choose to change on an even front. That would only serve to prolong the status quo. Similarly we cannot safely bank on the centre-periphery mode of change, i.e. that provided by agents such as the University of Botswana INSET-interventions which though useful have a very ineffective ripple influence.

It seems to me that the best strategy the colleges can employ is one which decidedly disturbs the equilibrium somewhat for the staffs of these colleges to shift perspectives by looking back at their programmes so far in order to get feedback which they can use to collectively explore alternatives for more reflective, deliberative and collaborative programmes.

By disturbing the equilibrium I mean bringing about change in a more explicit way than the rather implicit interventions that are the norm in our educational system. Explicit change here means change that is known by everybody in the institution, the formal leadership, lecturers and student teachers so that involving them may induce clarity, consensus and commitment. Implicit change is the type that happens to parts of the programme and would be inappropriate for the kind of change in teacher education that I would like to see collectively planned, coordinated and articulated. Planning is more useful when it is essentially oriented to action.

References

ARENDS R.I Learning to Teach. Assessment and Evaluation. 3rd Edition 1994

COSTA L.A. How Can We Recognise Improved Student Thinking? in Costa L.A. Editor Developing Minds: A Resource Book for Teaching Thinking.

CRUCKSHANK D.P. Research that informs Teachers and Teacher Educators. Phi Delta Kappa 1990.

EDUCATION STAFF TRAINING DEVELOPMENT PROGRAMME Teacher Education the Professionalisation of Teaching, its Problems and Prospects United Nations – Economic Commission for Africa.March 1991.

GAGE N.L., BERLINER D.C. LEARNING Theory and its Applications: Educational Psychology 3rd Edition 1984.

HARTLEY J. Learning Theory in Practice in Hartley J. and Davies K.I. contributions to an Educational Technology volume 2. KOGAN PAGE 1979.

GRIFFIN A.G. Crossing the Bridge: The First Years of Teaching in Lasley J.T. Editor The Dynamics of change in Teacher Education. ERIC on Teacher Education 1986.

KERLINGER F,N/PEDHAZUR E.J. Multiple Regression in Behavioural Research Holt Rinehart and Winston INC 1973.

KOUWWENHOUYEN W. How successful is your program? Research into the effectivenss of UB-INSET interventions for the professional development of teachers. UB-INSET: UNIVERSITY OF BOTSWANA.

MANASSE A.L Improving Conditions for Principal Effectiveness: Policy Implications of Research in The Elementary School Journal Volume 85 no.3 pp. 439-446.

MARTON F. What does it Take to Learn. in, Hartley J. and Davies K.I. Contributions to an Educational Technology Volume 2 Kogan Page 1979.

MEADE Jr E.J. (The Ford Foundation) Some Implications for preparing Teachers in LASLEY T.J. Editor ISSUES IN TEACHER EDUCATION ERIC CLEARINGHOUSE ON TEACHER EDUCATION 1986.

PARLE a M and HAMILTON D. Evaluation as Illumination in Hartley J and Davies I.K. Contributions to an Educational Technology Volume 2 Kogan page 1979.

PROPHET R.B. Educational Research in Botswana 1986-1991. Recent Trends and Future Directions in Burchfield S. (editor) RESEARCH FOR EDUCATIONAL POLICY AND PLANNING IN BOTSWANA. MACMILLIAN 1994.

RATHEDI M. Improving the Supply and Quality of Teachers for Basic Education. in SEGAKWENG S. and YOUNGMAN F (editors) EDUCATION FOR ALL IN BOTSWANA.

Macmillian 1991.SPARZO F.J.Preparing Better Teacher-Made Tests. Phi Delta Kappa Educational Foundation. 1990.

SPRINTHALL N.A AND SPRINTHALL R.C. Developmental Aspects of Information Processing. Educational Psychology 4th Edition 1987

STELLER A.W. Effective Schools Research: Practice and Promise. Phi Delta Kappa Fastback 276 1988

THOMPSON A.R. Management of Educational Reform. EDUCATION AND DEVELOPMENT IN AFRICA. Macmillian 1980

TAYLOR W.L. Professional development or personal development? in Hoyle E. and Megarry J. World Yearbook of Education Professional Development of Teachers. Kogan Page 1980.

TERRY/Page G. and THOMAS J.B with Marshall A.R. international Dictionary of Education 1987.

WOOLFOLK A.E Cognitive Views of Learning EDUCATIONAL PSYCHOLOGY 6TH Edition ALLYN & BACON 1995.

YONEMURA MARGARET. Reflections on Teacher Empowerment and Teacher Education in Margo Okazawa-Rey, James Anderson, and Rob Traver, Teachers, Teaching and Teacher Education. Harvard Educational Review 1 987

YOUNGMAN F. Issues and Trends in Education for ALL in Botswana in SEGAKWENG S. and YOUNGMAN F. (editors) EDUCATION FOR ALL IN BOTSWANA Macmillian 1991

YOUNGMAN F. The Role of the University in Developing Research Capacity and Influencing Educational Decisions. In Burchfield S. (editor) Research for Educational Policy and Planning in Botswana Macmillian 1994.

ZEICHNER K.M. AND LISTON D.P Teaching Student Teachers to Reflect, in Margo Okazawa-Rey, James anderson, and Rob Traver, Teachers, Teaching and Teacher Education, Harvard Educational Review 1987.

THE EFFECT OF TRAINING PROGRAMS FOR LABORATORIES PERSONNEL ON THEIR PERFORMANCE

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INTRODUCTION

Laboratories are considered important and effective means in simplifying concepts, symbols, and vocabularies. They are the base of scientific progress, technological advancement, and the route to apprehension. They help to explain theories and open the horizons for new knowledge.

The Jordanian Ministry of Education realized the importance of laboratories and demonstration experiments in science as a part of the overall academic performance of student. To implement this approach, the ministry established modern laboratories equipped with necessary equipment, employed specialists, and conducted training programs for personnel in charge of these laboratories. Furthermore, it continues to supply these laboratories with the expertise and materials as needed to conduct experiments in different fields including chemistry, physics, biology, and earth science.

The performance of lab specialists without taking into consideration the overall environment and conditions surrounding them is unsuitable conduct may lead to wrong evaluation. Some of the elements that must be considered in the evaluation process are laboratory buildings, equipments, materials, curriculum, and faculty members. Once these elements are available and performing as required by using well-defined measurement articles, then, the performance of lab personnel can be properly judged.

The importance of the study is defined by its uniqueness in Jordan. No researcher has conducted such a study in this field in the past Since the Ministry considered teaching laboratories education as a part of evaluating, student performance careful thought has been given to lab personnel and their performance.

Problem of this Study

This study is concerned with identifying the effects of training programs conducted by the Ministry of Education for laboratory personnel. To be more specific, the study is conducted to answer the following questions:

1. Is there any significant difference ($\alpha<0.05$) between the means in evaluating the performance of lab personnel who attended training programs on planing and those who did not.
2. Is there significant difference ($\alpha<0.05$) between the means in evaluating the performance of lab personnel who attend training programs on organization and implementation and those who did not.
3. Is there significant difference ($\alpha<0.05$) between the means in evaluating the performance of lab personnel who attend training programs on monitoring and quality control and those who did not.
4. Is there significant difference ($\alpha<0.05$) between the means in evaluating the performance of lab personnel who attend training programs on neatness maintenance and general safety and those who did not.

Hypotheses

The assumptions for each question are formulated as follows:

- i- There are no differences with statistical significance ($a< 0.05$) among the means in evaluating the performance of those who attended training programs on planning and those who did not attend.
- ii- There are no differences with statistical significance ($a<0.05$) among the means in evaluating the performance of those who attended training programs on organizations and implementation with those who did not attend.
- iii- There are no differences with statistical significance ($a< 0.05$) among the means in evaluating the performance of those who attended training programs on monitoring and quality control compared with who did not attend.
- iv- There are no differences with statistical significance ($a< 0.05$) among the means in evaluating the performance of those who attended training programs on neatness, maintenance, and safety and those who did not attend.

Operational definitions

1. Training program is defined as any of the training programs conducted by AL-Zarqa Department of Education division one and/or two in the period October 4,1994 May 31,1995.

2. Laboratory personnel are any of the persons supervising experiments in school labs, whether specialists or not.

Procedures

5.1 Population:

This work includes all school belong to AL-Zarqa Ed.Dept second division. Forty eight individuals are working in labs in this division, twenty one of whom are in elementary and secondary education for males and the rest are in female school of the same type. This division is considered in this investigation since it has provided the training program under study. In addition, the researcher is familiar with the employees of this division.

5.2 Sample:

The sample of this study includes two groups of trainees and is called the experimental group which consist of ten people selected at random from sixteen trainees.

The second group which is the control group did not attend the training program and it includes ten people selected randomly from thirty two workers. The second group is called the control group.

Methodology

The researcher use the performance evaluation method designed by a group of specialist selected from the Ministry of Education. This method is called "The Performance of Laboratory Personnel". This report includes four categories which are: (planing; organization and implementation; monitoring and quality control; and neatness, maintenance and safty). In the first session of the training program for lab personnel. which took place in the period from October 4 to Dec 20 1994 include the following subjects laboratory management, safety, preparation for experiments equipment handling, electrical equipment maintenance.

In the second session, which started from 7 march until 13 may, 1995 included training on the following subjects: glass formation, preservation of samples, chemical equipment and devices, waves behavior, light, mechanics, magnetism, preparing of models and prototype.

The selection of individuals for the study sample was done with the help of the division of education technology at the second division of AL-Zarqa Department of Education.

A list of lab personnel included sixteen participant who attended the training program was obtained and ten of them were selected at random. A different list of participant who did not attend the program was obtained. This list included 32 individuals, ten of them were randomly selected for the study The researcher observed the effect of the training program of their performance in the four categories mentioned above.

The evaluation progress

The researcher paid a visit to each individual in the study sample in both groups, the experimental and control group. Using the evaluation articles designed by the specialists from the Ministry, the performance of the individuals was ranked from one to five. Five, which is the highest rank was given to individuals with excellent performance. Other performances were given rank 4,3,2,1 for very good average, and poor performances respectively The evaluation article was designed as a questionnaire for each of the categories. Each category has different aspects, and each aspect was ranked as discussed above. For example, in the case which includes a planned comprehensive syllabus for all activities and experiments to be constructed in each semester, the syllabus should contain: the objectives, methods, activities, dates and periods of the experiments. In addition, it should show how this syllabus corresponds to the syllabus given by school teachers in subjects related to the experiments. In deciding the level of performance in any subject in planning, objectives let us conceder the following questions .

- Are the objectives defined?
- Are the objectives correctly formulated?
- Are objectives comprehensive?

Therefore, if the individuals have a planned syllabus, and if its Objectives are well defined and comprehensive, then the individual deserves a (5). Otherwise he gets a grade from 4 to 1 depending on how close he is near from condition.

Whatever is applied to the objective it is applied to other aspects in the planning criteria, on the other hand, whatever is applicable in planning is applied in other categories.

The grades for the performance are then filled in a privet form. For each individual in the sample then the information are filled in other form.

For example, the grades in a planning category, for the experimental sample "individuals who attended the program {App.3} are shown in Table 1.

Table (1)

The Results from the Experimental Sample in the Planning Category

The Planning Aspect		**Grade**				**Mean**	
			5	**4**	**2**	**2**	**1**
Objectives		0	4	2	4	0	
Operation And Method	0	3	3	3	1		
Date And Time		0	4	3	3	0	
Duration		0	3	2	2	3	
Coorrdination With	0	3	3	1	3		
Teachers						7	2.8
Total		0	17	13	13		

The table shows that the number of individuals in the experimental sample making rank (5) out of five is zero, It also shows that seventeen individuals making 4 out of five. It also shows that thirteen individuals making 3 out of five and so on.

The mean is then calculated as follows:

$$M= \frac{7XI+13x2+13x3+17x4}{5X10} = \frac{140}{50} = 2.8$$

The mean for the control group in the planning category was calculated in the same way. It was found to be 2.36. The means for all other categories are also calculated for both samples of the experimental and control group in all categories.

8. Statistical Treatment of The Results.

The researcher used (t) test to compare between the means of performance for both experimental and control groups in all categories.

It is noticed from the comparison of means that there are differences in all categories The difference range from 0.44 in the planning

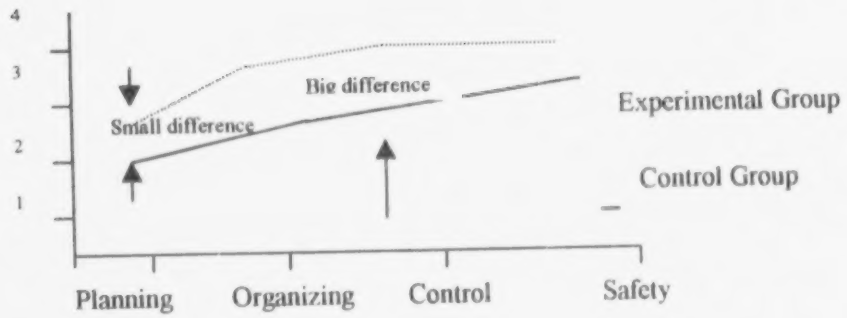
Table (2) shows the differences in performance between the groups in all categories.

Table (2)

Category in	The Experimental Group	1u^1	The Control Group	u^2	The Difference the Mean m1 m2
Planning	2 8		2.36		.44
Organization		4		2.9	
	1 .1				1
Control	4 3		3.3		
Safety		4.3		3.5	
	.8				

These means can be shown in the following figure

The Means of Both Samples



category to 1.1 in the organization category.

Results Analysis and discussion.

The results of the (t) test shows there is no significant differences between expermental and control group in to planning category (a<0.05). The (t) calculated in the planning category is less than its critical value .83<1.73 as shown in Table (3).

Table (3)
The Means of the Performance of the Two Groups with (t)Values for Planning

Category	U_1	U_2	S_1	S_2	Sample	Calculated value	Calculated value (t)
Planning	2.8	2.36	1.06	1.2	20	0.83	1.734

This implies the clarity and precision of the objectives for both group and the training program did not Support the planning concept.
The (t) value is calculated as follows:

$$t = \frac{U_1 - U_2}{?\left(\frac{1}{n_1} + \frac{1}{n_2}\right)\left(\frac{S_1^2 U_1 + S_2^2 U_2}{2 - n_1 + n_2}\right)}$$

n_1 = Number of the experimental group.
n_2 = Number of the Control group.
S_1 = Standard divination of the experimental.
S_2 = Standard divination of the control.
U_1 = Means of the experimental category.
U_2 = Means of the control category.

There were sinificant differences in the oranization and monitoring categories. As shown in Table 4.

Table (4)
The Means of the Performance for the Two Groups with (t) Values for Organization

Category	U_1	U_2	S_1	S_2	Sample	Calculated	Critical (t)
Organization	4	2.9	.98	.88	20	2.5	1.734

In the organization category the calculated is found to be greater than the critical value (2.5 > 1.734) this gives an indication of the effectiveness of the pro gram in the organization category.

Results in the category of monitoring and quality control are given in Table 5 for both groups.

Table (5)
The Means of the Performance for the Two Group with (t) Valuse for Control.

Category	U_1	U_2	S_1	S_2	Sample	Calculated	Critical (t)
Monitoring and quality control	4.3	3.3	.84	1.2	2.0	2.04	1.734

The calculated (t) value is greater than the critical value in this case (1.734 < 2.04). This gives an indication of the effectiveness of the program of this category.

Results in the category of neatness and safty are given in Table (6) for both groups.

Table (6)
The Means of the Performance for the Two Groups with (t) Valus for Safty.

Category	U_1	U_2	S_1	S_2	Sample size	Calculated (t)	Critical (t)
Neatness and safety	4.3	3.5	.8	1.07	20	1.8	1.734

In the neatness and safty aspect. The (t) test show a difference between the two group. The calculated (t) was a little higher than the critical value (1.734 c 1.8). This also indicates the importance of the training program in this aspect.

Recommendation

We can suggest from this study the following recomendations:

a. It is necessary to include the planning facror in the training programs for laboratory personnel.
b. A comparison between the performance of the specialist and non specialist worker in laboratories.
c. To compare the performance of participants in different fields individually.
d. To conduct similar studies in other divisions in the Ministry of Education.
e. To continue to conduct such programs for particepants who did not attend.

A knowledgement

I could like to thank the ministry of education and al - zarqa ed. dept second division in Jordan for cooperation.

References

All References in Arabic language:
Guidence in chemical labs working;
Jordanian Chemical Committee, 1979. - Laboratories Personal Performance; Educational Traning Center, 1995.
Labsoratories and Teaching Science; Zubi, Talal.
Rule Safty In Chemical Labs Working; Rawashdh, Ib. 1990.
Science Teaching, UNCO, AL-Kuteeb, A, S. Translation.

CLASSIFYING TEACHERS IN RANKS AS A BASE TO PROFESSIONALZE TEACHING

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Study problem importance and specification

Whenever the teachers' body is mentioned it is usually described as being huge cincluding many thousands that constitute the largest proportion of any nation's institution in Jordan, for instance' teachers' body forms about 60% of the Governmental cadres.

This huge size in Teachers' numbers that increase along with the number of children and / or the growth of educational development project, is characterized as being a flat system where any possibility of professional progression is lacking. A teacher starts a teacher and retires a teacher, he is only exceptional among other teachers according to his number of years in service for there is no ranks among teachers who work in small organizational units that are schools headed by a principal whereas the rest of the staff are called teachers . Again there exists no educational or administrative [adders through which teachers can be promoted in ranks and entitled.

However, the educational administrative systems namely the directorates of education and the ministry of education, they are also described as being modest, tabular and lacking in the professional promotional opportunities. Taking Jordan as an example, we can state the following facts and figures:

- There are 60,000 Teachers.
- There are 3000 School principals
- There are 700 Supervisor.
- There are 40 Director at the ministry of Education.
- There are 25 Field directors.
- There are 20 Directors - General

The following table clarifies these figures.

Table (1)
Number of teachers average per each administrative post .

Posts	Number	Teacher/administrative
Teachers	60,000	--
School principals	3000	20:1
Educational supervisors	500	120:1
Ministry Directors	40	1500:1
Field Directors	25	2400:1
Directors-General	20	3000:1

From this table we derive the following outcomes:

- Teacher's opportunity in functional promotion is highly unlikely consequently one teacher from twenty has the opportunity to become a school principal.
- One from 120 teachers has the opportunity to become an educational supervisor.

- One from 3000 teachers might become a director-General

Even the administrative opportunities are not considered to be a promotion for the teacher because requested efficiencies for administrative jobs are not available in large quantities of successive teachers; moreover, many teachers might desire to remain in teaching professions hence their feelings of the necessity of professional progress compels them to abandon teaching and search for administrative posits the fact that will deprive teaching profession from outstanding and innovative teachers.

This impells us to say that it is inevitable to look for other means, excluding administrative functions, to satisfy leachers' needs for self trust and to provide them with ranks that avail their efforts and stimulate them to improve their studies.

The continuity of this situation accompanied with the teachers' sentiments of the futility of any job changes might have the following negative results:

1. Decline of Teachers' incentives to practice their jobs, adding to that their sense of the futility of making special efforts because despite the efforts a teacher might make, he will always have the same title with no possibility of obtaining a progressive rank .
2. Many efficient teachers are motivated to search for other administrative jobs would distinguish them from their colleagues and this accords with the education administrative regulations that stipulates distinctive educational skills for those requesting administrative jobs.
3. The difficulty of attracting efficient staff to practice teaching because for this tabular profession does not appeal to distinguished people who are constantly looking for better conditions that would make them achieve professional growth .

And because required efficiencies for administrative work is not widely available among successive teachers, that is why administration opportunities not considered to be two progress for them, also they do not want to remain in teaching jobs in spite of that their feelings in the necessity of jobs progress compels them to leave teaching search for other administrative jobs the fact that will deprive the teaching profession from extraordinary teachers which indicates the following:

- Considering teachers, who are the large sector of simple workers who deserve compassion on the basis of pity for their conditions not for their professional or social status are constantly looked down upon.
- Constant progress in educational jobs on the basis of number of years in service without considering the teachers' in efforts and achievements .
- Constant selection of educational readerships of long term teachers, deprives them direct relationships with teachers, because the latter are mostly described as being young whereas the former are described as being old .

In Jordan, for example, SO% of leachers' age are below 35 years whereas educational supervisors' average age is 45 years and educational leaders' average age is 54 years.

This distance in ages means also a distance in generations and a distance in educational logic and awareness of the present which reflects a tragic state i.e when educational readerships are described as being, the readerships of the past, whereas teachers are the readerships of the future.

- Constant isolation of educationalists from society and the feeble participation of teachers in significant social activities. A teacher holds the title of "teacher" for a lifetime without a rank that distinguish him from thousands of his colleagues and that gives him pride and opens to him wide social horizons.

One of the most outstanding indications of feelings of aggravation among teachers in Jordan, is that most of councils and committees are national ones where educational public sectors are represented, whereas educationalists do not participate in any social, economic or cultural committees .

The continuity of this situation and the deprivation of teachers of professional ranks that replicates gradual progress in their ranks might lead to more educational immobility or educational retardation that fact that signifies the importance of striving for creating ranks for teachers .

Different professions reflect gradual progress in ranks; physicians, for example, are promoted from a.G.Ps to a specialists to consultant physicians, lawyers are promoted from trainees to advocates.

University professors are promoted from lecturers to assistant professors to associate professors and *finally* professors.

However, teachers starting with the title of" teacher" and persists as teachers regardless of their differences in achievements, accomplishments and performances.

Hence the problem of this research has occurred and is assessed as follows: (Teachers' ranks as the basis for professionalizing education) consequently various questions are related to this problem.

Study questions:

1. What ranks can be designated for teachers?
2. What are teachers' attitudes towards these ranks?
3. What are the criteria for transfering in ranks?

Study Assumptions:

1. Teachers are distinctive in their performances and achievements .
2. Developing education to become a profession is educationalists requirement .
3. Professionalizing education leads to the improvement of teachers' status

Study Procedures:

In order to answer the study questions the following procedures must be undertaken:

1. Revising the Arabic literature regarding the teaching profession and demonstrating international experiences in defining teachers ranks.
2. Demonstrating and analyzing the possibility of classifying teachers in ranks.
3. Suggesting professional ranks and promotional standards from one profession to another.
4. Identifying the opinions of a number of teachers about classifying them in ranks.

The Teacher of the 21st Century:

First : Jacques Delors' report on this subject has specified the following features:

1. Teachers' role as a change agent and as incentives for tolerance and understanding.
2. The importance of promoting the teachers' social status and working conditions.

Moreover the report raised the following questions :

1. What can Society expect of its teachers?
2. What are the realistic demands that must be met?
3. What are teachers entitled to in return, in terms of working conditions, rights and status?
4. What type of people can become good teachers?
5. How can teachers' motivation and the quality of their teaching be maintained?

The report stated the following:

- In the past pupils were generally obliged to accept whatever was offered by schools, but now communities expect to have a say in decisions concerning instruction, such decisions have direct influence on teachers' working conditions and the demands made on them.[1]

- Most of the 50 million teachers in the world belong to organizations, which are concerned with conditions of work and training, these organizations can be instrumentals in establishing a climate of confidence in the profession and a positive attitude to new approaches to education.

- Unesco seeks that reasserting the importance of teachers and improving, teachers qualification are task which all governments must address themselves.
  Improving the quality and motivation of teachers be a priority in all countries :

  1. While the psychological and material situation of teachers differs greatly from country to country an upgrading of their status is essential if we want to enter the twenty first century.

  2. Teachers are also concerned to update their knowledge and skills, they have to become more efficient in their art inspite of teaching is a solitary activity, team work on group teaching is necessary to improve teaching.

Second: Graham Pike and David Selby, in their book Global Teacher, Global Learner,identified global teachers as:global centric rather than ethnocentric, facilitator, concerned in whole person, congruent, employs a range of teaching-learning styles, community teacher, seeks functional Inter-dependence and rights respectful, that reflects that the interests are concentrated on what we want from teachers rather than what teachers want to be able to promote and enhance their profession .

Third: a Symposium organized in Amman-Jordan in 1996, discussed the issue of enhancing teaching profession, and Teachers, attended by all former, ministers of Education in Jordan suggested classifying teachers in ranks, the following recommendation had been taken:

1. Ranks are necessary to enhance teachers and teaching profession.

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[1] Jacques Delors. Learning The Treasure Within, Report to UNESCO. Unesco publishing, 1996. P141-153.

(1) Graham pike and David selby, Global teacher, Global learner, London: Hodder and stougtion, 1988 P:272.

(2) Ministry of Education in Jordan. Symposium on Teaching profession. Amman. April, 1994.

2. Ranks be built on qualification and achievement (competency) rather than experience and years of service.
3. Ranks should not exceed 3 to 4 ones.
4. Transferring from a low rank to a higher rank needs measures and not to be transferred spontaneously.
5. Ranks should be linked or accompanied with a financial system, and not only moral titles

Fourth: English system has limited interest in classifying teachers on a ladder of five steps:
A
B
C
D
E
These ranks were set on a task base.

Teachers on level (A) practice Teaching only, and when they are asked to practice other tasks like guidance or developing, curricula they will have the rank (B) or (C)....etc. these ranks had been criticized by teachers and educators, because these ranks don't give teachers social status, or educational title in his work and in society .

Fifth: Teachers Ranks in our heritage:[2]
Arab-Islam heritage does not mention an organized system for classifying teachers' but we can notice that some literature reflectes very obvious ranks like:

- (Imam), who is scientifically deep in his subject .
- (Sheihk), who is in a second rank, and well qualified in religion and teaching
- (Austad) (professor ~ who is practicing Teaching for students
- (Teacher), who is practicing teaching for small children Examining these ranks, we can't find a professional philosophy in this classification, it only reflects a social status rather than a professional one.

Teachers Ranks

In the light of the related literature about teaching profession, and the needs of teachers to have ago status which leads to acknowleding teaching as a profession, the resarchers organised a brainstorming session of 8 experts in education. Referring to the three following principles Ranks are set accordingly:
(a) Classifying teachers according to their achievements and competencies.
(b) Classifying teachers according to their qualifications.
(c) Keeping the word " Teacher".

In each rank in the light of these study sets the following:

A. Teacher- Deputant.
B. First - Teacher.
C. Expert Teacher.
D. Consultant Teacher.

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[2] Ibrahim Ikish, Education in Audalos. M.A. Thesis Amman, 1981.

This classification needs measures and requirements inorder transfer from one rank to another whet are these requirements ?

The requirements of Transfer

The study sets the following requirements:

1. Each teacher must be qualified according to Educational law, and must have the certificates needed to his Job, before ranking .
2. Deputants in teaching must begin in the first rank, whatever their certificates are.
3. Every teacher has to achieve pre-conditioned before transferring to a higher rank.
4. Teachers organizations must have a say in evaluating teacher's achievements in cooperation with the official authorities.

Suggested conditions or Measures.

The experts in the brainstory session, agreed on measures should be met in transferring among ranks:

1) From A to B:

Teachers who are nominated to transfer from the rank A. to rank (B) should have to realize the following:

a) A submitting research related to his specialization or education in general.
b) Practical achievement related to curricula-teaching Methods, guidance, technology of education .
c) Study of a course in subject-Matter or Education in general in one of the universities, Centers, on Community Colleges .
d) No Transfer before 5 years .

2) From B to C:

Teachers shoulci achieve the following to be in rank c:

a) A University (course in Education or Subject matter
b) A Field research in the field of specialization
c) No Transfer before 5 years in rank B.

3) From C to D:

Teachers should achieve the following measures to be transferred to D .

a) A University Degree
b) A University Course in
  - Philosophy of Education
  - Educational Administration and Supervision .
  - Curricula and Teaching method.

A research in the field of developing some practices in teaching or curricula.This table explain all these Ranks.

Table No (1)

Ranks	Years	Transferring Measures
From A to B	5	Action research or practical achievement + University course.
From B to C	5	Field Research + University course Diploma in Education
From C to D	10	Developmental research + 2-3 University courses + MA Degree

Teachers Attitudes toward Ranking Teachers

The researcher tried to reveal ideas and opinions of Jordanian teachers toward this ranking system. A simple survey through a questionnaire was set up for this purpose, and distributed to a sample of 500 teachers, the sample was selected randomly, the following table explain this sample:

Table No (2)

Teachers	No.
Male	220
Female	280
Total	500

The sample contained teachers from Basic and Secondary level, from all regional directorate.

The questionnaire of this study contained four items:

1. Do you agree an disagree to this idea.
2. The measures on basis of ranking according to:
    - a- Achievements.
    - b- Years I Service.
    - c- Scientific qualification.
3. The ladder of Ranking.
4. The Consequences of ranking teachers.

The findings of this study reveal the following:

1. (85%) of Teachers support the idea of classifying teachers in ranks, female teachers (90%) are more supportive than male teachers (76%).
2. (81 %) of Teachers agree to classify teachers on achievement bases . female teachers (80%) are more supportive than male teachers (78%) .
3. Teachers refused classifying or ranks based on the length at of service or qualification ~ 55°/0, 65%.
4. Ranking teachers may lead to:
    - enhancing teachers to more efforts (78%).
    - Promoting teachers status (75%).
    - Improving teaching-learning process (75%).
    - enhancing profesionalizing teaching (73%).
    - Depressing teachers (22%).

The study in the light of these results considers that Jordanian teachers are sponsoring that ranking as a way to enhance teaching as a profession.

RECOMMENDATION

This study recommends the following:

1. Doing cross-cultural researches to know the attitudes of teachers towards professional ranks.
2. establishing firm measures and constitutions before starting implementing ranks system.
3. adopting ranks experimentally to a limited number of teachers, especially debutantes.
4. Alerting teachers' before implementing ranks.
5. Minimizing the side effects of ranking like competition, conflict, and depression.
6. Relating ranks to new responsibilities and tasks and to new financial allowances according to different ranks.

References

Jacques Delors. Learning A Treasure Within Report to UNESCO. UNESCO publishing 1996.

Graham Pike and David Selby. Global Teacher, Global Education, London: Hodder and Stougton, 1988.

Susan Fountain.Education for Development.Unicef. 1995.

Linda Shaiawy. Learning to Teach. Instructor books, West Virginia, 1989.

Ian Reece and Stephen Walker. Teaching, Training and Learning. New college Durham. Business Education Publishers, 1994.

Ministry of Education in Jordan. A symposium on Teacher's Ranks. Amman. April: 1996.

Ibraheem, Ikish, Education in Al-Andalos. MA thesis. University of Jordan. 1981.

Ministry of Education in Jordan.Statistical Report, Amman. 1995.

REFORM OF MATRICULATION EXAMS IN ISRAEL-INTERACTION BETWEEN THE TEACHING/LEARNING PROCESS AND ASSESSMENT

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Since the 50's, the Israeli educational system has been using matriculation exams, which are standardized tests designed to establish a uniform study level for Israel's high school students and to serve as a screening tool for institutions of higher education. During this time, the number of students finishing the 12th grade was on the rise and passed 85% in the last years. The average number of students entitled to a matriculation certificate, however, is only 38%.

According to the current system of matriculation exams, high school students are required to sit for exams on the following compulsory subjects : Hebrew, English, Mathematics, Bible, History of Israel and Civics . These exams constitute 15 out of the 20 minimum study units required in order to receive a matriculation certificate . The load of exams can be distributed over three high school years .

The current system was adopted after 4 reforms carried out during the past 40 years, which dealt mainly with the following issues : range of compulsory subjects to be tested, number of the tests, level of the tests, number of study hours required, distribution on the test load over three years, increase in the number of those entitled to a matriculation certificate .

Israel is not the only country to have been struggling with the dilemma of the ideal structure of the matriculation exams . Several other countries have been dealing with similar questions over the past decades, among them England, Germany, France and the U.S.

Nevo (1980) points out the positive and negative aspects associated with the matriculation exams . Positive aspects :

- The matriculation grades constitute basic information that can be used to predict the success of the students in the next stage of their studies .

- The matriculation exams can serve both the teachers and the Ministry of Education as a tool for assessing the extent to which the teaching process has succeeded in meeting the educational goals that they set for themselves .

- The matriculation exams help in identifying classes that are either behind or exceptionally successful in certain area and entire schools that are weak or advanced compared to others .

- Under certain circumstances, the matriculation exams may be helpful in evaluating the quality of teaching or teaching methods that were used .

- The exams serve to increase learning motivation as a general incentive resulting mostly from the motive of competition and the fear of failure . According to author, several teachers claim that without matriculation exams the learning effort would weaken significantly and he level of high school education would fall .

- The existence of matriculation exams creates a creates a certain uniformity in the subject taught and in the level of teaching, which institutions of higher education in Israel greatly rely on . Abolishing the matriculation exams would force them to set up a system of testing knowledge for selection, in order to guarantee at least the minimal level that require .

- Matriculation exam grades are preferable to he students receive from their teachers for the following reasons : a- the grades are based on exams built better than those of the average teacher; b- matriculation exams do not have the subjective elements and do not involve the various pressures exerted on teachers giving to their own students .

Negative aspects

- Some students will not prepare for the matriculation exams by trying to understand the material, but will be content with a superficial command, with the sole aim of getting a high grade . Teachers may cooperate with and enforce this utilitarian attitude .

- The regular matriculation exam questionnaires in use "punish" creative students, since they are mostly based on memorizing and repeating as accurately as possible what the teacher or book says . Matriculation exams compel the students and their teachers to adhere to the syllabus; they cannot expand or deepen their studies or be creative in the areas they find interest in .

- As regards motivation, teachers are concerned that students should deal with the material out of intrinsic curiosity and interest, and not out of fear of failure or out of competitiveness . Extrinsic motivation, such as that attributed to matriculation exams, is short term by nature . Moreover, in the long term, it may create antagonism towards the study material . It is preferable to create a freer and more open atmosphere in classes, an atmosphere in which learning occurs out of intrinsic interest .

- Exams cause emotional stress, anxiety and unease .

- Matriculation tests put pressure on teachers as well, the matriculation grades being an indirect indicator of their success in teaching .

- The great importance attributed to matriculation exams by students and parents may lead to cheating .

- Organizing all the elements of the matriculation exams-writing the questionnaires, administering and grading the exams-is a very complicated and costly process . Abolishing the exams would produce great savings in manpower and budget .
- Matriculation exams are often deficient in validity in reliability .

- Matriculation exams have a broad social-selective significance which enforces ethnic and social gaps .

From out first-hand knowledge of the Israeli high-school system, and from our studies of the research carried out on these issues in Israel and other parts of the world, it seems to us that there is a need for a more meaningful change in the format of matriculation exams in Israel, and that the latest reform proposed in 1994, which we will further expand on, does suggest some far-reaching changes . The reasons that have led us to consolidate our position on the necessity for changing the existent format of matriculation exams stem from the fact that most of the arguments in favor of external matriculation exams are actually not carried into practice, and do not achieve the goals expected of them . Furthermore, the proposed change will allow for variety in teaching, learning and assessment methods .

The following are a few sources that support these claims :

The matriculation exam as a tool to predict success in higher academic studies

Shapira and Etzioni (1973) found that the validity of the matriculation exams in predicting achievements in the first and second years of study at the Tel Aviv University is very low (r=28) . They also showed that the maximum validity could be found at the Faculty of Natural Sciences, whereas at the Faculty of Social Sciences and Humanities the validity was comparatively low . The authors explain these differences by showing that the learning methods in Natural Sciences are more similar to those used in high school . It is familiar knowledge that the methods used in teaching natural sciences at high school combine research, laboratory experiments, individual and team work, thus also employing a wider variety of assessment methods . All these contribute to creating a more independent and responsible learner who succeeds better in cooping with assignments he gets at University . Based on these facts and on the above - mentioned research data, we can conclude that more attention should be paid in high school to varying teaching and assessment methods - which is very difficult to achieve with he current format of the matriculation exams .

Perlberg and Israeli (1980), in their article entitled "Predicting Success at Studying in the Technion" reached the conclusion that the high school final grades, which form 50% of the matriculation grade and are given by teachers, are no less valid or maybe even better indicators of future success than the matriculation exam result . This finding encourages and enforces the view the ongoingassessment based on a continuous learning process contributes to fulfilling the potential of the learners, as it is reflected in their academic studies .

Ben Shachar and Beller (1980) show that the validity of the Israeli matriculation in predicting future performance is significantly lower (between 0.28 and 0.41) than the validity of the high school grades in the USA (0.55) .

The authors of the research point out that this result is somewhat surmising, since it would have been reasonable to assume that the Israeli matriculation exam, which is relatively standardized, would be more valid in predicting future success than the American high school grads, where there is no attempt to standardize on a national scale.

In our opinion, these findings result from the fact that without an external matriculation exam (as in the case of the USA), which greatly limits teaching and learning methods, the school can prepare its graduates to cope with the requirements of institutions of higher learning, such as developing an independent learner, learners sharing responsibility for their studies, team work, and the use of data banks .

The reliability and the validity of matriculation exams

Pilliner (1961), Or (1963), **Zak** (1977) point to the low level of reliability and low predictive validity of matriculation exams in Israel .

Ben Shachar Borenstein (1979), and Ben Shachar and Greenpeter (1979) prepared different statistical analyses of the matriculation exam grads in the main subjects and determined the examiners grading reliability (each exam is graded separately by two examiners) . Only in Math and English did they find an adequate degree of reliability . In the other subjects different degrees of reliability were found, all of which were lower than desirable .

In their of the reliability of the matriculation grades, **Nevo and Ben Shacher** (1985) found that the degree of reliability of the grading done by two examiners was in general acceptable when compared to other places in the world, but in a few subjects it was not satisfactory . They also found instances of deviation from the grading instructions in all subjects by 10% - 15% of the examiners .

The ability matriculation exams to serve as a tool for evaluating the quality of teaching

Essen and Bernstein (1958) show that formulating teaching goals, choosing the method and content of learning as well as the assessment of achievements must all form one complete whole . The goals of the curriculum must be defined explicitly and clearly, so that the material to be studied and he methods should result from them . The authors point out that in Israel there is usually no adequate mutual relationship between the teaching goals, the syllabus and the methods of assessing achievements .

Although this research was carried out a few decades ago, its results are still relevant today, since we have not yet found the way to create this mutual relationship between the methods of assessment and the teaching - learning processes .

In his "Matriculation Exams and Possible Alternatives", **Bentowitz** (1980) mentions the doubtful effect of the matriculation exams on the teachers . "They deprive the teacher of initiative and creativity in choosing the material to be taught, which might awaken the interest of the students and guide them towards independent thinking and creating a world outlook . They also frustrate the teacher's efforts to inculcate values ."

Relying on grades given by the school would develop the school's programs in accordance with its abilities and the wishes of the teachers and the parents, without being restricted by programs dictated from above . Teachers would be allowed to use their initiative and creativity; they would be able to vary the contents of their teaching, their teaching methods and suit them to their students .

Matriculation exams as a tool of encouraging motivation

McGraw & McCullers (1979) found that the attempt to reward the subjects of learning by means of an extrinsic reward makes intellectual activities rigid and distracts them from the main purposes of learning . On the other hand, stressing the aspects of "what" and "how" the student learns improve learning . Something very occurs in Israel in all that is connected to the matriculation exams . In their current format these exams constitute extrinsic reward, and as such they do not enable the student to focus on the teaching goals, do not contribute to the development of an independent learner, and eventually have a detrimental effect on the achievements of the student . The method

1037

investigated in this research, however, will allow the development of the student's intrinsic motivation and focus on the learning processes .

Jonson & Jonson (1985) define motivation "as the degree to which the students invest in order to reach learning achievements in areas that they perceive as meaningful and worthwhile for them" . The question is what are the required conditions that would make the student perceive a certain subject as meaningful and worthwhile for him/her? In our opinion, first of all and regardless of the subject of learning, we should be concerned with creating conditions that will encourage the student's involvement in the teaching - process .

Decisions concerning learning issues, such as: what are the goals of learning, what is the most meaningful and effective methods of teaching for the learner to achieve those goals, what is the assessment method that will enable the learner to demonstrate in the best way the knowledge that he/she has acquired and even decisions concerning the scope of the curriculum and finding authentic assignments that are meaningful to the learner, all of which will lead to students involvement and responsibility for learning and, as result, to their perceiving the subject of study as meaningful and worthwhile for them .

This study will reflect aspects that point to the degree of the student's involvement in the teaching - learning processes, and we will be able to point to their contribution to the student's motivation .

Freedman (1967), **Jonson** (1980) point out that most of students motivation is influenced by their peers . This aspect will also find expression in this study, since the central process deals with varying the teaching and assessment methods, one of which being group work and peer assessment .

Corno & Rohrkemper (1985) deal with the issue of intrinsic motivation, which means that learners self - monitor their own learning process . They indicate two elements of intrinsic motivation to learning: individual responsibility and ability . The authors show that there is still much to learn about the intrinsic motivation of the student in class . They hope that the intrinsic motivation of researchers and educators will lead them to lead them to deal with these issues .

Varying teaching, learning and assessment methods

The need for varying the methods of teaching, learning and assessment arises from the educational - psychological view the maintains that human beings have different abilities in different fields . Students will better be able to express their different abilities and styles if school opens before them a variety of learning methods and does not assess their achievements according to the same criteria . Many psychologists and educators are studying these issues both in Israel and in other countries .

In his book entitled "Several Intelligence's" . **Gardner** (1996) condemns the teaching method currently common in the USA which he calls "the identical approach", and which is based on the assumption that people's minds can be assessed in a one-dimensional way . According to this approach, each and every student is required to know a series of facts, which they are tested on by means of regular paper and pencil tests out of a selection of IQ and SAT tests . By contrast with this approach, **Gardner** presents an alternative vision, which is based on a radically different outlook about thinking and about the mind, and which produces a completely different approach to school . This is the pluralistic approach to the human spirit, which recognizes the fact that people have differcognitive powers and therefore intelligence cannot be measured in a one-dimensional way . According to **Gardner**, intelligence "the ability to solve problems or create products that one or several cultural or community frameworks find valuable".

According to this approach, there are seven intelligences : Musical, Corporal - movement, Logical - mathematical, Linguistic, Inter- personal . **Gardner** calls schools that take into consideration the existence of multiple intelligences "schools focused on the individual". These schools will take into consideration the fact that each student has different measure of each of the seven intelligences . In order for each student to be able to express his/her strongest skills, the methods of teaching and assessment must be varied . **Gardner** considers assessment very important, since in his words "we have let the tail of tests wag the dog, which is the curriculum".

In Israel, the situation is very similar, especially as regards the matriculation exams and their effect on teaching . The project accompanied by this study allows schools to focus more on the individual, in order to enable individuals to present their knowledge in a variety of ways that reflect the different above - mentioned intelligences . The "portfolio", which in this project constitutes one of the central methods of assessment, and which we will elaborate on later, is a good example for this approach .

Birenboim (1995) shows that "the current decade is characterized by increasing awareness of the importance of assessment in designing curricula and methods of teaching and learning, as well as in the wide variety of forms of assessment". The widespread term in recent years in the Western world, and especially in the U.S. with regards to assessment of achievements is alternative assessment, including terms like performance assessment, hands-on assessment, direct assessment, balanced assessment, assessment anchored in teaching, authentic assignments, portfolio and others .

The principles of alternative assessment include the following goals; assessment that creates motivation, assessment of processes, assessment carried out together with learning, a process that encourages intersciplnary leaning, the leaner sharing the responsibility for learning, assessment that includes reflective thinking . **Sizer** (1992), one of the world's leading figures in developing the modern high school based on alternative assessment, claims that schools do not prepare their students properly for life and coping in the modern world, and therefore they have to undergo essential change .

The proposed study

The project that this study is based on took shape during 1994, after having received the recommendations of the "Ben Peretz" committee . The later were published in a report called "**Matriculation 2000**" (1994) . Partial application of the project began in 22 schools, in September 1995 (a more detailed description of the project will follow) .

The recommendations of the "Ben Peretz" committee refer to both pedagogical and social aspects .

Here are a few quotations from the committee report on these issues :

Pedagogical aspects

- "The basic assumption underlying the recommendations of the committee is that there is a strong interconnection between the methods of assessing achievements, and the teaching methods and the ways of learning . The variation of teaching depends to a great extent on adapting the assessment methods to the variety of teaching methods, by means of bringing the assessment closer to the learning, by transferring most of it to the jurisdiction of schools" (pp. 11-12) .

- "The committee feels that the current exams do not afford opportunity for adequate expression of the depth and creativity of learning, and they even cause heavy pressure on students and teachers" (p.12) .

- "The recommendations of the committee are meant to create a pedagogical and organizational infrastructure that will make possible the gradual development of valid and reliable school assessment, which will be as valuable as the national assessment" (p.12) .

- "One of the aspects of strengthening the assessment done by schools, in general, is introducing a sequence of ongoing assessment which combines tests with methods of alternative assessment such sd writing research papers, carrying out project, editing portfolios, etc." (p.12) .

- "The committee feels that the high school system should deal with the issue of varying teaching and improving learning and adapting the ways of assessing achievements to this move .

Social aspects

- "The main point that guided the considerations of the committee while they were working on their recommendations was that full school education is meant as far as possible for all youngsters in every school year, and therefore on should strive to reach a ratio of 100% . The committee feels that a situation where more than half of the youngsters of a certain age group are not entitled to a matriculation certificate is unacceptable" (p.13) .

There have always been those who are in favor of a national examination system, and those who are against it and suggest entrusting the assessment of achievements to schools . The Ben Peretz committee supports combining the national exams with assessment by the school "There will be 3-4 national matriculation exams, together with school assessments which will be of equal value" . Enabling the schools to assess their students in some subjects without matriculation exams results from the assumption that this will have a beneficial effect on different aspects connected to teaching, learning and assessment in high school . These issues are extremely important and fundamental, and constitute, in face, the very chore of educational work in schools.

At the beginning of the 1994/95 school year, the Ministry of Education pinpointed 22 schools throughout the country, which become the pilot schools for applying the recommendations of the Ben Petrtz committee . In the pamphlet called "**The Project of 22 Schools - Matriculation 2000**" (1995), the authors describe the considerations that guided the Ministry of Education in its choice of schools : representation of all sections of the educational system (general/religious/Druse/Arab), diversification of the student population (more and less affluent), geographical diversity (north/center/south of the country) . Each of these schools was given the possibility of choosing up to three subjects which the students will not have to be tested on it an external matriculation exam, and in which the grads will be given by their teachers through ongoing school assessment . This will enable the teachers to change and vary their teaching methods and to adapt alternative assessment methods that fit them . The Israeli Ministry of Education accompanies this project with extensive professional support both from senior officials from the Ministry and from the suitable academic staff .

The study and its importance

The importance of the study consists in its providing information about the effect of assessment on the teaching and learning process, with regards to two different assessment methods :

a) the currently used methods, according to which the final grade is made up of the end-of-the-year grade given by the teacher (50%) and the grade of the matriculation exam (50%0 . This method forces the teachers to adhere more to the structure of the external exam .

b) the suggested methods, according to which the final grade will be based only on ongoing school assessment . This method allows teachers to vary teaching and learning methods, and to choose suitable varied and innovative assessment methods.

The questions that will be examined are as follows :

a) To what extent were diverse assessment, learning and teaching methods used?

b) To what extent did the students' motivation to learn and the teachers' motivation to teach increase?

c) What were the changes that occurred in the work of the teacher teams?

d) To what extent did the students' involvement and responsibility in the teaching - learning process increase?

In the future, we might also deal with the question of the validity of school assessment in predict the success of the graduates in institutions of higher education and in the way they will otherwise function in society . We will be able to attribute these achievements to the findings that will be received concerning the students' motivation and the extent of their responsibility in the teaching -learning process .

The study related to three schools out of the 22 included in the project, and also to three additional schools which constitute the control group . The study is designed so that there are two control groups . One is within each of the schools that participate in the project, and its purpose is to check the effect of the project carried out in certain subjects on other subjects, on other teacher teams and on school atmosphere in general .

The second control group includes schools that do not participate in the project, and its purpose is to check differences in productivity between schools that participate in the project and those that do not . The study deals with students who were studying in the 10th grade in the 1995/96 school year and includes both humanities and science .

Date will be collected at two times, with an interval of a year between them, by means of: questionnaires answered by students, teachers and librarians, class observation, structured interviews with people who have central roles in the project .

Partial results

The result the statistical analyses were based on were gathered from three groups of teachers : teachers who participated in the project (the study group), teachers who did not participate in the project, but taught in schools that did (control group a), and teachers who taught in schools that had no connection with the project (control group b) . Each of the above - mentioned group numbered 26-27 teachers, some of whom taught science subjects and others humanities .

The teachers were asked to respond to questionnaires, some of which dealt with the teachers (variation of teaching and evaluation methods, team work, teachers' motivation), and other dealt with students (their involvement and responsibility in the learning processes and the school climate) . This analysis deals only with the results that were received from the teachers during their first year of work in the project .

Means, SD's and their graphic representation appear in Table 1 and Figure 1. Table 2 and 3 contain the summary tables for ANOVAS carried out for control groups and b respectively .

Table (1)
Means and SD's for project group and the two control groups

		Study Group			Control Group a			Control Group b		
			Hum **	Total	Scie *	Hum **	Total	Scie *	Hum **	Total
Variation of teaching and evaluating methods	Mean SD N	3.38 (.32) 12	3.24 (.49) 14	3.30 (.42) 26	2.87 (.50) 13	3.00 (.56) 14	2.94 (.53) 27	3.05 (.33) 8	2.85 (.54) 18	2.91 (.49) 26
Team Work	Mean SD N	4.19 (.26) 12	3.77 (.50) 14	3.96 (.46) 26	3.34 (.63) 13	3.30 (.58) 14	3.32 (.59) 27	3.54 (.44) 8	3.40 (.62) 18	3.44 (.56) 26
Involvement and responsibility of students	Mean SD N	3.18 (.49) 12	3.20 (.41) 14	3.19 (.44) 26	2.83 (.57) 13	2.70 (.63) 14	2.76 (.59) 27	3.07 (.42) 8	2.98 (.66) 18	3.01 (.59) 26
School Climate	Mean SD N	3.81 (.44) 12	3.82 (.38) 14	3.81 (.40) 26	3.37 (.65) 13	3.49 (.40) 14	3.43 (.53) 27	3.52 (.30) 8	3.62 (.55) 18	3.59 (.48) 26
Motivation of teachers	Mean SD N	4.11 (.45) 12	4.10 (.49) 14	4.11 (.46) 26	3.80 (.67) 13	3.87 (.67) 14	3.84 (.66) 27	4.08 (.34) 8	4.00 (.40) 18	4.02 (.38) 26

* Science
** Humanities

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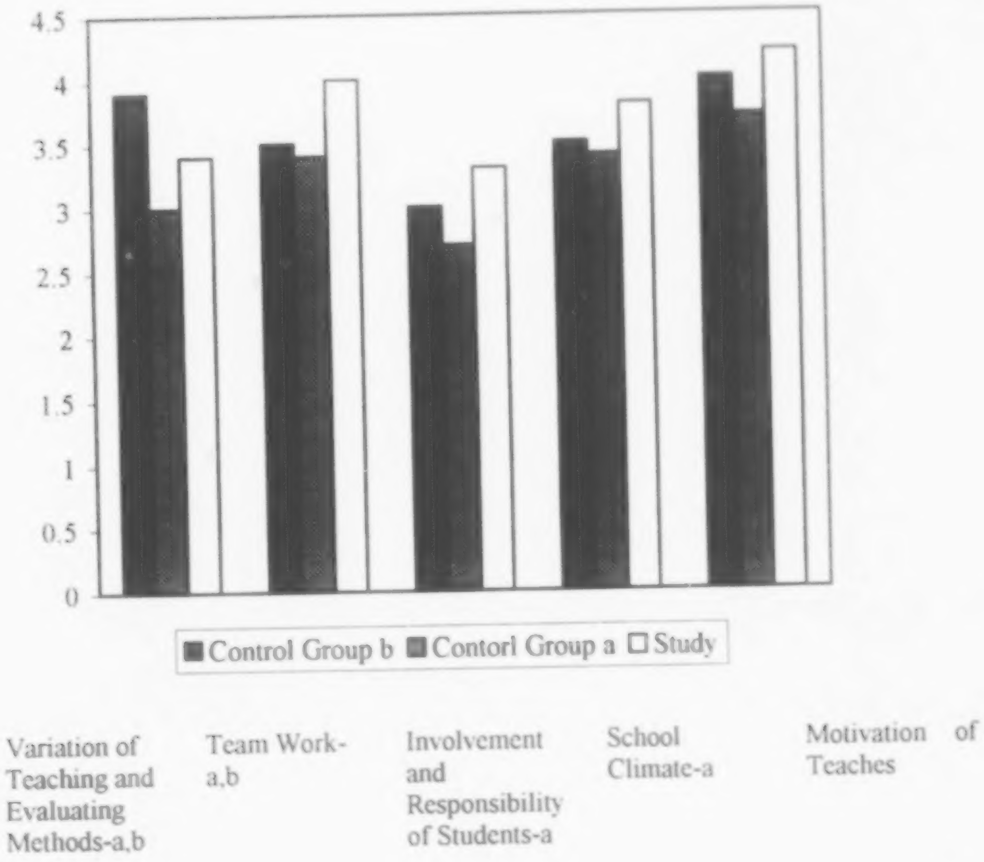
Figure (1)
Means of Study and Control Groups a and b



a- Significant differences between the study group and the control group in the project.

b- Significant differences between the study group and the control group not in the project.

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Table (2)
Summary table for ANOVA carried out for control group a .

Variation of Teaching and Evaluating Methods

Source of variation	SS	df	MS	F	P
B (Stream - humanities /Science)	.00	1	.00	.00	.987
C (Group study/control	1.87	1	1.87	8.09	.006
BC	.24	1	.24	1.04	.313
Within cell (exp. Error)	11.34	49	.23	1.26	.296
Total	13.45	52			

Team Work

Source of variation	SS	df	MS	F	P
B (Stream - humanities /Science)	.70	1	.70	2.63	.111
C (Group study/control	5.79	1	5.79	21.59	.000
BC	.49	1	.49	1.84	.180
Within cell (exp. Error)	13.14	49	.27	1.26	.296
Total	20.12	52			

School Climate

Source of variation	SS	df	MS	F	P
B (Stream - humanities /Science)	.05	1	.05	.23	.630
C (Group study/control	1.93	1	1.93	8.48	.005
BC	.04	1	.04	.16	.690
Within cell (exp. Error)	11.14	49	.23	1.26	.296
Total	13.16	52			

Involvement and Responsibility of Students

Source of variation	SS	df	MS	F	P
B (Stream - humanities /Science)	.33	1	.33	.12	.733
C (Group study/control	2.39	1	2.39	8.46	.005
BC	.07	1	.07	.23	.630
Within cell (exp. Error)	13.87	49	.28	1.26	.296
Total	16.66	52			

Motivation of Teachers

Source of variation	SS	df	MS	F	P
B (Stream - humanities /Science)	.02	1	.02	.05	.828
C (Group study/control	.96	1	.96	2.83	.099
BC	.02	1	.02	.06	.806
Within cell (exp. Error)	16.70	49	.34	1.26	.296
Total	17.7	52			

B

Table (3)

Summary table for ANOVA carried out for control group b .

Variation of Teaching and Evaluating Methods

Source of variation	SS	df	MS	F	P
B (Stream - humanities /Science)	.35	1	.35	1.69	.199
C (Group study/control)	1.56	1	1.56	7.60	.008
BC	.01	1	.01	.06	.799
Within cell (exp. error)	9.85	48	.20	.34	.888
Total	11.77	51			

Team Work

Source of variation	SS	df	MS	F	P
B (Stream - humanities /Science)	.95	1	.95	3.85	.056
C (Group study/control)	3.17	1	3.17	12.61	.001
BC	.24	1	.24	.98	.327
Within cell (exp. error)	11.86	48	.25	.34	.888
Total	20.12	51			

School Climate

Source of variation	SS	df	MS	F	P
B (Stream - humanities /Science)	.03	1	.03	.17	.683
C (Group study/control	.72	1	.72	3.55	.066
BC	.02	1	.02	.10	.746
Within cell (exp. error)	9.75	48	.2	.34	.888
Total	10.52	51			

Involvement and Responsibility of Students

Source of variation	SS	df	MS	F	P
B (Stream - humanities /Science)	.01	1	.01	.05	.822
C (Group study/control	.33	1	.33	1.17	.284
BC	.04	1	.04	.13	.720
Within cell (exp. error)	13.44	48	.28	.34	.888
Total	13.82	51			

Motivation of Teachers

Source of variation	SS	df	MS	F	P
B (Stream - humanities /Science)	.02	1	.02	.11	.745
C (Group study/control	.05	1	.05	.30	.586
BC	.01	1	.01	.08	.773
Within cell (exp. error)	8.86	48	.18	.34	.888
Total	8.94	51			

DISCUSSION AND CONCLUSIONS

The data show clearly that the means for the study group, both in science subjects and in humanities, are higher in all the dependent variables than the means for the two control groups . We should, however, examine the differences between the results received for each of the control groups .

The differences in a larger number of variables were between the study group and the control group which contained teachers in schools that participated in the (control group a), whereas the differences between the study group and the second control group, which consisted of teachers from schools that did not belong to the project (control group b), appeared in a smaller number of variables .

The comparison between the study group and control group a shows that expect for the variable of teachers' motivation, in which no significant difference was found between the study group and the control group and both were high (x=4.11 out of 5 for the study group, and x=3.84 out of 5 for the control group), in all the other variables (variation of teaching and evaluating methods, team work, student responsibility and involvement in the learning process) there were significant difference in favor of the study group .

The data presented for lead to the conclusion that the project, even in its initial stages, had a positive influence on each of the dependent variables that were checked . It is possible that the difference in the variable of motivation was not significant at this stage, since in the schools that joined the project voluntarily, motivation was high anyway, and the change in motivation is a process that requires a longer time . This conjecture will be checked during the second year of the project .

The comparison between the study group b shows that here too there are significant differences in favor of the study group, although meaningful differences were received only for the two variables of variation of teaching and evaluating methods and team work, which are variables that the project could affect sooner and more directly .

The comparison of the results received so far between the study group and the two control groups shows that the variables : variation of teaching and evaluating methods and team work, were influenced considerably, and a significant difference was found in favor of the study group, when compared to both control group . From the point of view of the teachers, these two variables are extremely meaningful in the project, since they deal with the very essence of the educational activity in teachers' work both with their colleagues and with students . These results corroborate the reports received from the three coordinators in the schools that participated in the project .

As far as variation of teaching and evaluating methods is concerned, all three project coordinators reported a significant improvement . Here are some examples of the coor' descriptions : efficient use of portfolios, group teaching, use of overhead projectors, scientific movies, study trips, increased use of laboratories, development of study centers according to subjects, exposure to new software, wide use of worksheets, use of the Jigsaw method and peer teaching .

Concerning team work, all three coordinators reported a significant improvement . For example, more meetings were held, suggestions were made for work in class, secondary teams were created which specialized in sub-subjects, the teachers planned to divide the work load among them . The results presented so far demonstrate the effect of the project from the teachers' point of view. At a later stage, we shall see how the students view the effect of the project .

References

Ben - Shachar, G., Borenstein, P. (1979) . *A Statistical Analysis of the Matriculation Exam Questionnaires* . Report No. I; Report No. 2. Jerusalem : The Department for Exams, The Ministry of Education and Culture . (Stencil) . (in Hbrew) .

Ben - Shachar, G., Greenpeter, A. (1979). Report No. 3 . *The Reliability of Evaluating Matriculation Exams* . Jerusalem : The Department for Exams, The Ministry of Education and Culture (Sencil). (in Hebrew) .

Ben - Shachar, G., Beller, M. (1980) *Evaluation of the Use of Matriculation Exam Grads for Selecting Students*, in : Baruch Nevo, editor, Matriculation Exams, Tel-Aviv: Am Oved, pp.77-89. (in Hebrew) .

Bentowitz, Y. (1980), *Matriculation Exams and Possible Alternatives, in Baruch Nevo,* editor, Matriculation Exams, Tel-Aviv, Am Ovred, pp. 109-115. (in Hebrew) .

Birenboim, M. (1990)Alternative in Evaluating Achievements - Towards Evaluation Suited to the Individual , In Hen.D, editor, Education towards the 21st century, Tel-Aviv,Ramot Publishing, pp. 187-205. . (in Hebrew) .

Corno, L. & Rohrkemper. M.M. (1985). The Intrinsic Motivation to Learn in Classrooms . In C. Ames & R. Ames (Ed.), Motivation in Education : Vol. 2. The Classroom Millieu (pp. 53-90) . Orlando, Florida .

Edden, M.A., Bernstein, R. (1985). High School Curricula and Evaluating Achievements . Trends, 9, 3, July, 201-206. (in Hebrew) .

Freedman, M. (1967). The student and capmus climates of learning . Washington, DC: U.S. Department of Health, Education, and Welfare .

Gardner, H. (1996), multiple Intelligences - from Theory to Practice (translated from English) . Jerusalem : The Ministry of Education and the Branco Weiss Institute . (in Hebrew)

Johnson, D. W. (1980) . Group process : Influences of student - student interaction on school outcomes . In J. McMillan (Ed), Social psychology of school learning . New York : Academic Press.

Jonson, D.W. & Jonson, T.R. (1985) . Motivational Processes in Cooperative, Competitive, and Individualistic Learning Situation . In C. Ames & R. Ames (Ed.), Motivation in Education : Vol. 2. The Classroom Milieu (pp. 249-286) . Orlando, Florida .

Matriculation 2000- the report of the committee for checking the system of matriculation and final exams (Ben-Peretz Committee), (1994) . Jerusalem : The Ministry of Education and Culture . (in Hebrew)

McGraw, K.O. & McCullers, J.C. (1979) . Evidence of a detrimental effect of extrinsic incentives on breaking a mental set . Journal of Experimental Social Psychology, 15, 285-294 .

Nevo, B., (1980) . Matriculation Exams : Positive and Negative Aspects . From : Nevo, B. (editor) Matriculation Exams . Tel-Aviv : Am Ovred, 205-212 . (in Hebrew) .

Nevo, B., Ben-Shachar, G. (1985) . The Reliability of the Assessment of Matriculation Exams . Trends, 29,1,February, 42-56 . (in Hebrew) .

Or, L. (1963) . Reliability of the Matriculation Test . Trends . 12,3,March, 220-243. (in Hebrew) .

Perlberg, A., Israeli . R. (1980) . Predicting Success in Studies at the Technion . In : Baruch Nevo, editor, Matriculation Exams, Tel - Aviv, 108-90 (in Hebrew) .

Pilliner, A.E.G. (1961) . The measurement of educational achievement in Israel . Paris : UNESCO .

Sizer, R.T. (1992) . Horace's school - Redesigning the American High School, Houghton Mifflin Company, Boston N. Y London, 1992 .

Project of 22 schools - Matriculation 2000, (1995) . Jerusalem : The Ministry of Education and Culture . (in Hebrew) .

Shapira, R., Etzioni Halevi, Ch. (1973) . Success at Academic Studies : How Predictable is it? Trends, 19,3, 215-231 . (in Hebrew) .

Zak, I. (1977, May) . The impact of school leaving certificates in Israel on its Society . Paper presented at the third conference of the International Association for Educational Assessment , school leaving alternatives . Nairobi, Kenya .

APPLYING THE PEDAGOGICAL CYBERNETIC
[SUPPORT FOR THE TRAINING OF INSTRUCTIONAL PERSONAL]

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INTRODUCTION

Educational technology has opened up for the teaching professional a new world of innovation and creativity which lend support to the pursuit of the alltainment of human excellence . As direct agents of education we have as our end purpose the promotion of active learning in our students .

The intervention of the professional teacher trainer is considered as an instrumental - operative ideal so that the student may acquire significant and relevant knowledge with the purpose of comprehending the reality of his surrounding environment .

Structure of the present work comprises four parts :

1) Situational Analysis
2) Needs Assessment
3) Solution Alternatives
4) Didactic and Methodological Recommendations

The proposed strategies, the curricular model and the elaboration of cybernetic models applied to the pedagogy provided the educator / researcher with an infinite range of innovation within the planning and evaluation of the program . Creativity will be essential in arriving at a critical analysis of its planning .

I hope the experiences and strategies presented, serve as a model in different regions of the world in order to integrate innovative technologies which science has provided to us .

Throughout the years, education in our country has passed through different pedagogical currents; the Mexican Government has always concerned itself with the notion that education should regain the place it once help, under the enhancement of our great pedagogues during the Golden Age of the Rural Mexican School . The present Government guided by the president of the republic Ernesto Zedillo Ponce De Leon, has committed itself to a new organization, an authentic educational federalism; "The National Accord for Modernization of Basic Education".

In the Accord, three fundamental strands will be followed in basic and Normal Education :

a) Reorganization of the Educational System.
b) Reformulation of Content and Educational Materials .
c) Social Revaluation of the Magisterial Function .

Within this point the formation of the teacher educator requires constant and permanent pedagogic innovation which will lead it to discover new experiences in the field of learning .

The professor as well as the future teacher educator ought to challenge the obstacles and concentrate on the new technologies that our changing world offers, with the goal of satisfying the needs of their educational environment .

It is urgent to define priories for the development of the Normal School . As the new tendencies of science and technology undertake the theoretical - practical aspects, to begin with, it is essential that the future teacher educator acquire an essential pedagogic formation to determine the quality of scientific education .

Educational modernization, the new programs, the utilization of modern innovative technologies that are well structured and supported in the different pedagogic currents, will never be considered efficient if teachers in service and future teacher educators do not find themselves properly capacitated to understand and utilize them .

The study in this recent investigation points to detected problems in our Normal School of the Desert "Profra . Amina Madera Lauterio" located in Cedral, San Luis Potosl, Mexico .

1. Situational Analysis

"The Program and Study Plan "which serves as a guide for the training programs teachers utilized at our educational level, outlines a program of eight semesters which are completed in four years of professional preparation . Three years undergraduate study in educational pedagogy at the bachelor's degree level are a prerequisite to completion of the program .

Among the most important objectives for the credential preparation program are the following :

- To train professionals ready for employment in the teaching field .
- To prepare students to undertake educational research, so that a positive attitude toward pedagogic innovation is exhibited during the teacher's employment in the field .
- To favor the progress of integration and development of the new educator so that he exercises his profession honorably and responsibly .
- To infuse the training program with a nationalistic conviction, preserving and enriching the values of culture which maintain our national identity .
- To provide a training program based on the principles of our political constitution, with the goal of placing our future teachers in a position of commitment, ad agents for social change .

Among the expected outcomes are distinguished the following :

a) To build up the cultural heritage favoring the development of the individual with the purpose of achieving the goals outlined in Article 3° of our constitution .
b) To be conscious the importance of preserving one's physical and the mental well-being
c) To make of the teaching practice and its training role a systematic exercise, based on educational research and what is contributed by science and technology to such research .
d) To master culturally based content, the teaching of which should be promoted among the students .
e) To interact positively with students and the educational community .

f) To promote socially significant learning, which is creatively, systematically and innovatively relevant .
g) To promote in students a critical and reflective attitude with respect to the intellectual, cultural and moral concerns .
h) To constantly evaluate the process of teaching and learning, both in group interaction and individually achieved accomplishments .

The plan and the program of study bring together the fundamental characteristics necessary to achieve a positive result in our students . Notwithstanding, the following needs have been identified with of the use the operational diagnostic tool :

AREA "A" : BASIC

OPERATIVE INFORMATION

The need has been established for information for the adequate functioning of the institution especially that information required for decision making purpose . Currently, such information is provided for only partially and sporadically .

The administration receives reports about different activities and involves itself in making decisions regarding problems that occur periodically, but such involvement is rare .

SOCIAL NEEDS

The social needs which ought to be addressed have been defined with quantitative precision . Each school year in service goals are fixed in general form .

AVAILABLE RESOURCES

All resources available to the institution have been defined and quantified in general form but it is not known if all the possibilities of achieving the greatest benefit from the available resources have been explored, especially those which have been inefficiently utilized .

GENERAL AND OPERATIVE OBJECTIVES

Mid-term and long term objectives are set clearly in writing with positive results in general in all departments . Unfortunately, an operative deficiency exists in that, these objectives are not analyzed or restructured for the purpose of overcoming deficiencies detected during each school period .

With respect to the Teaching Apprenticeship, the objectives to reach each level are defined with quantitative precision, but the quality of these objectives is not known.

The policie which norm the type of desired growth have been defined, and objectives to reach in each department are established, with only some administrators involved in the general and operative objectives .

The general and institutional objectives, the goals, the laws, the regulations, and the legal academic and administrative norms are not revised periodically .

AREA "B": SUPPLYING OF FUNDS

INSTRUCTION

Within the school population the minimum requirements of newly enrolled students are satisfactorily fulfilled . Work programs are organized in the orientation area for students as they register . But the number, quantity and value of the scholarships that are offered to students in subsequent school years have not been determined .

FACULTY . In agreement with plans and program, the need for teaching institution staff which are trained to satisfy present and future requirements, there exist isolated cases of career professors . In the majority of cases, the teaching institution staff consists of less educated teachers from the foundation of the institution .

Programs for training and updating knowledge of the new programs of study are either unknown or not yet in place .

The academic and economic conditions favorable for attracting and keeping qualified teaching institution staff are not provided, carried out or maintained .

AREA "C": PROCESS

PROCESS OF INVESTIGATION

The proposed goals, expectations and responsibilities are unknown or not clearly understood in this department . Research that is in accordance with the new programs is not being carried out . The research archives contain only information related to current projects . No information is contained about studies undertaken in other years .

It is also been noticed that in research undertaken by our students in the 8° semester, that practical, concrete solutions with productive results are not obtained . The focus of the research leans toward a theoretical - conceptual framework .

COMPLETED LEARNING

In agreement with the aforementioned, in most cases, the teaching which is carried out achieves the desired learner outcomes in terms of proposed goals and objectives . The percentage of accreditation for subject and grade is adjusted for goals and established norms, yet nevertheless the "pedagogic innovations" proposed by our students, fall far short of possessing a critical innovative and creative thinking process, such as the indications for the learner outcome would require, and which would make the teaching institution staff an agent for change in the society .

CULTURAL DIFFUSION

The functions of the teaching institution staff are moving toward the channeling of cultural content as well as toward the search for a solution to community problems, in such a way as contribute to the structurization and organization of the country. It is perceived that our graduates are not prepared to find solutions to problems that exist in the rural communities . Graduates always seek to realize their educational practice in a primary school as close as possible to the training institution . Upon completion of training, graduates possess in attitude of being "Licensed in Primary Education". Which demands, for their years of study, a better salary and location in an urban setting .

The institutions was created in the decade of the 70's, precisely so that graduates would take up roots in the rural, working class communities . (See the block of subjects that compose this career program, Annex B) .

2. NEEDS ASSESSMENT

In the school course year 1995- 1996 the institution counted 679 students in the primary level; of these only 475 were administered the survey which served as a guide to identify the most pressing needs in the crisis generalized from the institution.

The survey was applied to the students of the 2nd , 4th, 6th and 8th semesters of the Program for Career Licensing in Primary Education .

At present we count 706 students in the school course 1996-97 in the level primary .

A) SOCIOECONOMIC ASPECT

The average age of respondents who replied, varied from 18 to 27 years old . The prevailing economic class in this study is the lower-middle classes, the majority of which are students with scholarships from the State Government .

B) Academic And Labor Data

The majority of students do not work .

The institution has 39 professors (of which only 25 were surveyed) : 5 licensed in Psychology, 2 instructors and 4 licensed in Pedagogy, 2 instructors and 2 licensed in Science of Education, 2 licensed in National Pedagogy University, 3 instructors in Language and Literature 6 in Art Education, 2 in Physical Education, 1 Licensed in Computing, 1 Agronomic Technical, 2 Technology Education, 1 Teacher of Agronomic . The majority of these are working outside their area of specialization .

C) Detected Problems

The students and professors surveyed agreed on the importance of increasing professional experience, through courses in modern Pedagogy .

Both groups pointed out importance of a restructurization of the Study Plan or modification of the programs which, as a consequence of the extensive theoretical content, were not able to be analyzed in their totality in one semester.

The excessive theoretical load in the credential programs "enamor" the student which knowledge that serves to enhance his cultural traditions, but which falls considerably short of connecting to together with educational practice .

Another important aspect underscored by students in terms of content, is he lack of theoretical - practical connection in all subject areas .

The greatest preoccupation of the students is "How can I develop in my students a critical attitude?" . Our student discover themselves, that they have not been able even to develop such an attitude because they recognize that they do not find themselves prepared for it . They attend classes in observation of the precutting teaching staff in those communities near the institution, but unfortunately, a majority of the instructors utilize a traditionalist methodology. Thus when our new students face the community with an innovative methodology, they must work with the same instructors who impede the implementation of these methodologies.

Some 68% of the students admit finding themselves unprepared to undertake effective instruction. 22% believe they are prepared to each and 10% omit the answer to that question.

The education of human beings acquires structures that are generated in the process of development and acquisition of passing from one state of minor knowledge to another greater or more profound state, directly depending on the ongoing evaluation that should come about as a product of following recommendations are made.

3- SOLUTION ALTERNATIVES

a) That an evaluation of the institution should be carried out using and operational diagnostic tool.

b) That teachers commit to elaborating the "Cybernetic model" contemplating the structural tree, the schematic, the interrelations of themes and the planning outline for each class.

c) Utilization of systematic models of unity and class, elaborated by teachers and students with the purpose of generating their own concepts and involving themselves in new educational technologies.

d) That the courses of investigation be programmed throughout the career program as a subject that serves to support the Teaching - Learning methodology.

e) That knowledge and content be structured in accordance with systemic models, with the purpose of improving the time, the effort spent, and eliminating thematic repetitions.

f) That there be relationship between institutional and professional objectives.

g) That the evaluation contemplate content and professional delivery.

h) That the process of teaching and learning be : gradual, flexible, practical, and defined in terms of human relations, in order to establish an atmosphere of confidence among members of the educational community.

i) That greater relevance be given to meaningful learning and to discovery learning.

j) That ongoing inservice training be offered to teaching staff as adjunct to their professional development.

k) That the resedepartment of the institution, contract research personnel to conduct relevant research in the helping tosolve the impending educational crisis.

4 - DIDACTIC - METHODOLOGICAL RECOMMENDATIONS

Policy is an important aspect in the determination and shaping of suitable means for the completion of goals of any human organization. The policies of an institution ought to be orient toward the analysis of the reality and the adaptation of the means and the ends of education. All of this, should be tied together with the culmination of the administrative process. for this reason the proposal is made to apply an Operational Diagnostic that should be contained the model that is suggested later, and that can serve as a basis to evaluate and detect the faults of the Study Plan, pr in some cases, restructure the present. (see the Annex "A").

Among other recommendations it is important :

- That in teacher preparation institutions there exist a climate of communication, of availability and orientation among all those involved in the educational process .
- The student who desires to enroll in an institution of this type ought to have, aside from the requirements in the entry profile, the following characteristics : self confidence, a social and humanitarian conscience, possessing a didactic ability, and competence in terms of scientific preparation .

The instructor who works this level ought to know regarding his students :

a) Their learning styles .
b) Their ability to resolve problems .
c) The way in which students interrelate the theoretical and practical sides, for their formative framework .
d) The reconstruction of their own axis or methodological framework .
e) The degree of development of their mental abilities .
f) Their acquired knowledge .

To respond the needs exposed by the students, a teacher in the credential program in normal education, ought to develop in this students .

1. Capacity for analysis / synthesis .
2. Abstract reasoning .
3. Promoting cultural and moral values, such as confidence, values clarification, self-criticism, self - evaluation, truthfulness, etc.
4. Motivating, creativity and pedagogical contents .
5. Developing methods of participate search .
6. Cultivating the habits of reading, reports and critical analysis .
7. Encouraging the development of the symbolic function .
8. Building logical though .
9. Enriching abstract language .
10. Utilizing resource offered by the media .
11. Building the philosophical, psychological and sociological foundations .

CONCLUSIONS

The Pedagogical Cybernetic used as a method of instruction, presents to the instructor a practical knowledge of the planning and evaluation of the activities and themes to include in his course .

The structural tree offers us a general panoramic of the units . The "Graph" will lead to analysis of the Themes .

The Diagram of the interrelations and exposures of each of his classes will serve in correcting, providing feedback and planning the contents .

The proposed Curricular Model will serve as a basis to elaborate an operational diagnostic of the institution and realize in the near future, a new Plan of Studies of the credential program in Licensed Primary Education, or a restructuring and adaptation of the present .

It is necessary to insist not only the aforementioned problems are the cause of the low educational quality in our institution, but in addition, the inability or unwillingness of teachers to modify and revise their teaching program adversely affects the result . It is for this reason that I consider fundamental importance, the professional preparation of the teaching institution staff .

Finally, I wish to note that the crisis presented in this work refers only to those institution "Profra Amina Madera Lauterio" located in Cedral, San Luis Potosl, and this work in no way corresponds to other levels or areas of education in Mexico .

TRAINING TEACHERS FOR BILINGUAL CHILDREN

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1. INTRODUCTION

The existing schooling systems organized in lessons according to subject matters with professional teachers are products of historical developments. They have emerged in the framework and under the control of the states to serve national needs which should be identical with the needs of the citizens. They aim at preparing the young generation for the future by providing them with the necessary skills and abilities and knowledge about the past.

Decisions about the subject matters to be taught in schools and the curriculum itself are basically in the hand of the national states - and so is the teacher training. There are of course regional differences, however it is our intention to gain a very general platform by our statement in order to show the total dimension of our issue and anticipate possible difficulties which proposals for radical reforms will face since states are hardly able or willing to change their educational system as easily as firms may change their management structure nowadays.

Pupils are provided with knowledge; children are educated or *human resources are developed* - which of these concepts fits best at the turning point of our century? And parallel to these questions, we may ask: shall the teacher before all be a provider of knowledge, a socialization agent or a developer of (vocational) skills? The answer is not easy and definitely cannot be an *either/ or* clause. However, everybody will easily agree upon the idea that a good teacher must be multifunctional' flexible, and learned to prepare children for a future we do not yet know . But how to train him/her now to gain that ability to perform as a good teacher? We dare not give a positive answer in general but we are sure about a negative statement: the present way of letting candidates become experts in the traditional subject matters is surely neither an adequate nor a sufficient approach.

In the following chapters we concentrate on the language issue which plays an increasing role in keeping the two main present trends in mind: *globalization* and *regionalisation.* The national states are facing a huge variety of challenges which have to do with language in education.

2. Traditional Language Teaching and the Challenges of the Present

A glance at the history of the western world shows that language teaching began with foreign language instruction in the ancient times (Greek for speakers of Latin). And in the Middle Ages Latin was the language of the reamed Christian elite similar to the way Arabic is the language of the Holy Koran.

It was not before the 19th century that instruction in the mother tongue started in connection with compulsary schooling for all. And in addition to this, the demand for teaching modern foreign languages developed. These three paths, i.e. *the teaching of classic languages, mother tongue and modern foreign languages* are still the fundamental elements of organizing language instruction . Which languages are taught at schools and to what extent is agreed upon in the different states. And from their point of view it is also declared which one is the official language (mostly the mother tongue of the majority) and which languages are taught in addition to that privileged one.

Although this structure could never fully cover the sociolinguistic realities, it is very well reflected in the academic language teacher training at universities. There the students devote their energy to the different philological disciplines (for example Germanistic or Slavistic) and in addition to this they have to undergo courses in methodology of mother tongue teaching and/or foreign language teaching. - Gaining a general overall view urges us to neglect regional variations and the field of primary teacher education.

Since the last decades, however, changes initiated at the level of practice teaching are starting to gain ground and slowly are reaching the academic level of the universities. They are caused by the decrease of teaching the ancient languages in many European countries, at the one hand, and, at the other hand by the fact that many school languages like German, English, Spanish, Russian etc. which previously have been didactically well defined as being either *mother tongue or foreign languages*, are more and more forced to switch their roles.

The reasons are easily found if we highlight the clients of all educational efforts, the pupils. There are two main streams of changes: a *physical* and a *conceptional* one:

1. Following the globalization trend using the new possibilities of transport and exchange of information families move with their children from their traditional dwellings to other places with other language constellations. Local schools of the destination countries have to accept pupils with different language backgrounds and instructional experiences. The reasons may be varying: they range from labour force migration and refugee phenomena to the unification of Europe and the dissolving of the Soviet Union.

2. As a consequence of the electronic revolution changes and process-orientation are gaining ground in a trend against longer lasting static thinking. We find the slogans are 'lifelong learning' and we are supplied with informational knowledge by our machines in amounts more than we need. What we have to do is to use the technical means to select the knowledge needed. Consequently in education we the focus could switch on to *the processes of learning of the individuals* and this change inevitably has to be followed by a new orientation in teaching including language instruction and teacher training.

This change of paradigms is already reflected in our field by new conceptions under headlines which we present here in their abbreviation form first, like: FLL Foreign Language Learning - SLL Second Language Learning EFL English as a Foreign Language - ESL English as a Second Language ESP English for Specific Purposes; EAP English for Academic Purposes (The same typology is used for German and other target languages.) We even have a term for a new teaching area: TESOL = Teaching English to Speakers of Other Languages and one for the new kind of pupils: LEP = Limited English Proficient student. In addition to the terms foreign language and second language, we meet more and more new labels: HL = Heritage Language and CL=Community Language. All these abbreviations show that there is a significant movement in the field of language teaching which does not seem to be consolidated yet. A quick look at university programs in different countries could easily give more colour to our picture as well as a look at the practice at schools where there are many models in their experimental phase. I just mention here the large variety of international and bilingual schooling programs and the movement for Foreign Languages in Elementary Schools (FLES).

3. Bilingual Students' Language Learning Constellations

If we turn the focus of our camera from the professional field of teaching objectives to the concrete human beings and their natural language knowledge with or without schooling' we have to admit that the majority of people in our world has functional competencies in more than one language, i.e. the number of BILINGUALS exceeds that of monolinguals. This reality however is not essentially reflected in many national school systems - especially in those which follow the ideal of *one country one language.* I am not intending to promote an extreme position of 'justice for speakers of whatever languages' but I do think that this fact has to be a crucial element in planning language education at schools - and in **teacher training.** If we agree upon the fact that respect to the languages that are acquired at home or elsewhere informally is an important precondition for installing learner centered instruction, handling bilingualism in education turns out to be a **necessity** and we can proceed to the issue of HOW it could be done.

In the final chapter we will present some core principles and features as a basis of the new task. Before this, it seems useful to remember the external conditions of all formal instruction as are given by the socio-cultural contexts based on *geographical facts* and *historical developments* as well as on the *global role* of the languages concerned and their *linguistic* character.

Here are a few examples for different language learning contexts to illustrate possible environments: **1.** In the USA you find English as the target language for speakers of Spanish. Bilingualism is mostly regarded as a *transitional* phase for them. Important in this learning environment is the shared common culture and a reduced contact with the land of origin. **2.** Finnish immigrants to Sweden, also people from a neighbouring country learn under very different conditions. The two languages involved have only a small number of speakers in the world and they differ enormously in their linguistic structure. **3.** People from former colonies settling in the Netherlands, Great Briton or France each find themselves in very special conditions. **4.** The new immigration wave to Germany brought sociocultural implications along and the question of (double) citizenship. 5. The indigenous minorities in Romania including speakers of such languages as German and Hungarian show us quite another picture. 6. The language situations in the new south-eastern republics of the former Soviet Union are worth a detailed study in themselves as well as the language diversity situation in Africa.

Although all these language teaching and learning constellations are very, very different indeed they have one feature in common: they show us that the principle of *one state - one language* and *one person - one language* can in no way be the basis of the educational settings for our future. If, in addition, you think of the language discussions and the demand for multilanguage proficiency in a unifying EUROPE and the possibilities of the new electronic processors, the need for a thorough reconsideration of existing concepts for language instruction and language teacher training is obvious. Terms like the 'multicultural society', 'minority rights' and the fears of the majorities, new trends in more individualized classroom organization, and the increasing number of newly founded bilingual schools - all this points in the direction of substantial changes in the field of schooling. Most movements up to now, however, are predominantly very pragmatic and try to find practical solutions within the traditional framework on a managerial level by adding new subjects to the existing curriculum and/or just using additional languages as means of instruction.

4. Language Proficiency Analysis in the Turkish-German Context

My study about Turkish students language proficiency in two languages aimed at finding some underlying regularities which could *enlighten the reasons for the generally poor school achievement of migrant children in Germany*. In this paper I can only give a very short summary of the study which was executed ten years ago in Turkey and Germany, with students who had returned to Turkey from Germany after their primary education, as the core group, and several other control groups. To understand the setting, we start with some initial remarks about the socio-political and linguistic constellations in the countries involved.

Turkey and Germany are states with only one official language, which is taught as mother tongue education at schools and generally used as means of instruction in all other subject matters. Both languages are important since they have more than 100 million speakers. In this respect there are strong parallels. But investigating the positions of the languages in the partner country, we find specific differences, since Turkish in Germany is predominantly regarded as a community language (or heritage language). Besides this, there is an academic study-interest at the universities and scientific research under the headline of 'Orientalism'. German in Turkey is an academic subject being taught at secondary schools as a modern foreign language and has a position at university level as Gennanistic philology including the training of teachers. It takes part in the very favourable bilingual schooling model (Anatolian system) in which about 50% of the subjects (mostly natural sciences) are taught in that second language. The students of those schools are generally linguistically homogeneous of the social elite who start learning German in a one year preparatory intensive course after five years of primary education.

In 1984, the German government started an initiative to reward families for returning to Turkey. Consequently many school children moved to the land of their parents and it was agreed upon that they were accepted in those bilingual schools without the usual entrance examination. At this time, many teachers were sent from Germany to those schools to help in the 'reintegration'. This new situation for the Anatolian bilingual schools of having native-like speaking pupils and native speaking teachers for the second language, however, did not turn out to be a benefit, on the contrary there were many difficulties and complaints. Why? The students had difficulties in following the high standard of fact-based subject matter instruction in natural and social sciences, both in Turkish and in German - not to mention their deficits in the 'mother tongue' lessons alongside with their sociocultural adaptation problems. That leads us to the conclusion that some important presuppositions must have been neglected, which have to do with fundamental differences between bilingual individuals in traditional educational settings and the situation in bilingual school programs.

5. The Research Design

In my empirical study I tried to gather detailed information about language proficiency in two codes, avoiding standardized tests but analyzing on the basis of comparison. Since written language is more important for academic careers and also for my practical reasons, I collected written material from different schools. To find a common platform for evoking students' language response somewhere between bound and free expression, I decided to give a task of retelling a story in written form. The story was read twice before retelling always in the language that was to be used in writing.

I selected the Turkish folk story of BILGIC DEDE, a wise old man who wondered about the wisdom of a little girl, who had come to his house asking for some embers not having brought a bowl or another receptacle with her to carry it home. When the old man was hesitating and wondering how she could manage, she explained the procedure to him as saying 'I can carry it in my hands and will not be burnt if you first put some ashes in my hands and the embers upon them'.

The story-text consisted of different sections: some *descriptive* ones, some with *action*, a *historical excursus* about heating habits in olden times, the *climax*, and, in the *ending* there was a *moral* saying that human beings never finish learning, however old they may be.

For the analysis we gathered a total number of **366** student texts, **159** in **Turkish** and **207** in **German**, from a population consisting of bilingual 'returnees' (53), the 'normal' pupils of bilingual schooling (52) and monolingual Turks and Germans subcategorized 'younger' (41 each) and 'older' (14 each). The student groups who wrote in both languages were in the sixth and seventh grade - and so were the 'older' monolinguals. The 'younger' ones belonged to the fourth and fifth grades. In addition to these central comparable groups there was material available from students with diminished proficiencies in German, namely a class which learned German as a foreign language in Turkey in their third year (34) and a small remedial class of monolingual Germans (14), both belonging to the 'older' age group.(The texts of the 34 GFL-learners could not be included in the quantitative analysis).

The story was generally understood by all central group students, even the younger monolinguals of both countries - however, the younger Germans and the additional groups got explanations for understanding the content and some keywords including spelling helps from their language teachers. The comparison and evaluation of the written texts was executed under *quantitative* and *qualitative* aspects not only with respect to language mistakes, choices Vocabulary and sentence structures. The main focus was put on the question whether the task was managed as a whole, i.e. *was the retold story comprehensible, adequate in style, and did it contain the main points and the climax ?* For the analysis the story was portioned into paragraphs and the students' material was examined according to those sections in detail.

Our material allowed us comparisons in many respects. We were able to pay attention to intralinguistic aspects applying the *developmental* criteria for the monolinguals of the younger/older groups in both languages. After achieving 'normal monolingual language proficiency' as a standard - however deficient it was - we were able to compare these features with the performance of the students who were in the bilingual schooling program and with the results of our core group, the 'returnees'. In addition to this we had the possibility of interlinguistic comparison, studying the ways of writing and retelling stories in each country and at the same time we got the chance to find some *interethnic* characteristics *of* expression.

The concrete material to be analyzed and compared consisted of the following text-groups: In the central categories we had **eight sets** of student-texts, four groups for each language, i.e. 1. The ***monolinguals*** divided into two subcategories namely the younger and the older ones: **MYT** (Monol. Younger Turks) and **MOT** (Monol. Older Turks), **MYG** (Monol. Younger Germans) and **MOG** (Monol. Older Germans). 2. The **student *who wrote in both languages***, namely the ones with bilingual education: **BESt** (Bilingual Education Student's Turkish text) and **BESg** (Bilingual Education Student's

German text) as well as the **returnees**, i.e. **Rt** (Returnee's Turkish text) and **Rg** (Returnee's German text). In addition to this we had two groups of German texts from the categories **GFLS** (German as Foreign Language Students? and **RCS** (Remedial Class Students).
So for **intralingual** comparison existed the sets in Turkish: MYT ><MOT >< BESt><Rt, and in German MYG><MOT><BESg><Rg and in addition GFLS><RCS. For the interlingual comparison we had the main pairs MYT><MYG and MOT><MOG, BESt><BESg and Rt<Rg . Also there were many combinations possible for cross-comparisons.

6. Monolingual Students' Language Performance.

As a result of our step by step analysis we found a number of very distinct differences in the language performance of our testing groups. First I refer to the texts of the monolinguals (including the papers in Turkish of BES) and start with the ***national differences*** due to the cultural and educational background of the countries: **(a)** In the texts of the younger pupils we observed the feature that monolingual Turkish students rarely refrained from reproducing the *moral* at the end of the story, while the Germans mostly concluded their writing with the climax, the wondering of BILGIC DEDE and the returning of the girl to her home. Here are the quantitative results in percent. The **moral** was mentioned by 29% of MYG and by 78% of MYT; as for the 'older' students there was a rate of 69% for MOG, 71% for MOT and 100% for BESt). **(b)** Another culture-specific effect could have been realized in the reporting quote of the **digression** concerning heating habits in Turkey in olden times. This section was retold by 32% of MYG, by 44% of MYT and by 61% of MOG, MOT and BESt each. It was not reported by anyone of German RCS group. However this might also be seen as an issue of difficulty.

The question of how many students retold the story **completely** (c) was defined and measured according to their reaching the climax. Here also we could state some differences between the national groups documented most distinctly in the achievements of the younger ones. While all of the 'older' groups reached the climax we got a rate of only 80% by MYG and 98% by MYT. This lower range of the Germans is probably not only due to the fact that they were less familiar with the topic but it is certainly also a consequence of the reality, that the younger Germans had much more problems with the written form of their language than their Turkish counterparts. The reason for this we see in the very regular orthographic system of the Turkish language which follows the principle of *one phonetic sound - one letter*. The following phenomenon can definitely also to be traced back to that fact: **(d)** we find much more **spelling mistakes** in the texts of the younger Germans than in those of the Turks. The rates are 6% for MYG, 1% for MYT; 2% for MOG and MOT and 1% for BESt - and 8% for RC.

Another rather marginal interlanguage difference is (e) the use of block letters by some of the Turkish students (In Turkey children start reading and writing mostly with those letters). An interesting point of greater dimension is the fact (f) that some German students, MYG and MOG, added in their writings some extra explanations about the heating conventions to ease the understanding for the reader.

As for ***developmental differences*** we stated for all monolingual test-groups a trend against more conceptualized content treatment and a higher level of language command by the older ones. Apparently the task of retelling this story was easy for them. Concretely we could trace this fact in **(a)** the rate of **mistakes in expression** measured as percentage of the words used by the writers. We got for MYG 4%7 MYT 3%, and 1%

for MOG, MOT and BESt. Another developmental trend we see **(b) in the quantity of reproductions** i.e. the amount of words in relation to the original. Here we got a clear increase with the Germans with rates of MYG 32% to MOG 49%. The results of the Turks are not as obvious with MYT 41%, MOT 38% and BESt 51%; however we think that the low rate of MOT is probably due to a very little interest of the students in the task.- The story fits better to the curriculum of the fifth grade.

A **quality change** in writing habits we could state in an increasing ability to assimilate the ideas of the story thus gaining distance to the model. (c) While the younger ones were sticking to the diction of the original text the older ones were using their own narrative style, they *recreated the* story applying summaries and abstract conceptions. This was especially obvious with regard to the reproduction of details. (d) While the younger ones repeated some and deleted others the older ones summarized and by using their own words demonstrated an individual way of description.

Moreover we noticed a greater amount of experience and familiarity in composition writing with the older student groups indicated in the following aspects: They were able (e) to keep the **thread** and showed more proficiency in using the **grammatical tenses** and means of expressing **modality**. We could also state (f) a higher demand of mastering logical connections in **syntax** applying more logical conjunctions and (g) having command about networks of meaning in the **vocabulary** needed. So on the whole there was a better command of the language and a significant higher degree of *assimilation* of the ideas of the story with the older students. But this, on the other hand, led to the consequence, that the Germans, not being familiar with the local situation, made some misinterpretations as for the describing of the location of the house, the habits of the old man and the 'grill'.

By evaluating the monolingual students' writings we included the Turkish texts of the group with bilingual education program. This was well-founded, since as a matter of fact their performance in **Turkish** differed from the t normal ' older monolingual students only in the respect that they showed excellent results. - (For all data see appendix.)- Their performance in **German** however cannot be measured on the same scale. It can be characterized as a **second language** and described as *interlanguage* with certain deficits on a strong structural base. Those students did not reproduce a big quantity of text, only 32% (like the younger Germans), they concentrated on the main points, refraining from reproducing the digression, only 19% mentioned it ,and were not bothering about retelling all the details of the introduction. As for their *mistakes* there was a high rate in *grammar* with 4% against 1% respectively 0% with all monolinguals in their first language and the very high rate of 5% in *expression* (near to the younger Germans, see appendix). Very interesting is the fact, that the rate *of spelling* mistakes of this group is on the very low level of 1% in both language versions.

Tracing the qualitative divergence in the German texts of those students we can easily find the phenomen of *interference,* the problems of reduced command about *vocabulary* and as a result of a certain 'helplessness' the strategies of *avoidance,* of *simplification* and *paraphrasing.* These are the characteristics of foreign language learners. The task of retelling a story like this was obviously too demanding for the capacities of the students at that stage of learning. Although they are in a bilingual schooling program they cannot be called genuine bilinguals - but after another three years of instruction they certainly will have a proficiency in German which is much nearer to their excellent Turkish.

7. The Bilinguals

For all student groups analyzed above we found parameters to describe their abilities and explain their mistakes and deficiencies within the concept of monolingualism. In this context it is noteworthy, that their TEACHERS could give us valid information about the degree of difficulty of the task for a specific student group. Their experience in estimating students performance is generally sufficient to judge the achievement on a scale of progress. That's why they are able *to anticipate* difficulties and plan curriculum programs. Their professional knowledge is based on the teaching traditions, use of textbooks and didactic guidelines.

Our genuine bilinguals, the **'returnees'** do not face a similar situation. Their teachers were confronted with unexpected and unseen phenomena. We easily understand their feeling of *uncertainty* and *helplessness*, when we have a look at the texts of our core group. Those students are **fluent** in both of their languages, however their writing performance resembles in many respects that of the weakest groups of our settings. As for the relationship between the both languages we stated a very clear **interrelationship** in the *quantitative* and in the *qualitative* analysis. This was extraordinarily obvious in the spelling habits.

Here are the figures of the quantitative measurement:

1. The **mistake rates** of the bilinguals are distinctly over average.
In ***spelling*** *as 5%* Rt and 5% Rg, they are just below the 6% MYG and 8% RCS.
In ***grammar*** as 2% Rt and 3% Rg, the data are near to 4% BESg (note 1% RCS).
In ***expression*** *as* 4% Rt and 4% Rg, the results are like MYG and in the middle between BESg(5%) and RCS(3%).

2. The extent of **retelling the content** shows interesting results:

The ***quantity of reproduction*** as 42% Rt and 41% Rt is very near to MYT 41% and clearly better than the rates of MYG 32%, BESg 32% and RCS 22%.
As for ***completeness*** the data Rt 79% and Rt 84% show a slight difference in favour of the German version, they are near those of MYG 80% and of BESg 76% and very much higher than the RCS 28% - but lower than those of the older monolinguals who reached 100%.
In ***mentioning the moral*** Rt 68% and Rg 64% we notice a distinct distance to MYG 29% and RCS 14%, even to BESg 50%, but also a distance to BESt 100%, while they are near to MOT 71% and MOG 69%
As for ***retelling the digression*** we have higher figures in the Turkish texts compared with the Germans' Rt 55% and Rg 40%. This distance is also seen with the younger ones MYT 44% and MYG 32%. With older ones? there is no such difference (61% for all), but BESg 19% and RCS 0% are much more below the returnees' achievement in this paint.

The quantitative data confirmn that the candidates behave neither throughout like the younger ones or the weaker BESg or RCS groups nor do they seem to be conform with either of the national trends, - and that the results in both their languages are very near to each other. This feature is still more obvious if we have a look at the *qualitative* aspect. We noticed a strong trend to assimilate the content which lead to misinterpretations the way this happened with the older Germans. However there was another important distance to them' because the texts of the returnees were often not well organized, they lacked structuring in paragraphs, they **lost the thread** from time to time, and as for the use of **tenses** and **modality**, they frequently performed **incondetencies** like the students of the remedial class. We also noticed unacceptable colloquial language use - what happened also with the weakest of the younger Germans.

Like the 'foreign language learners' they applied *strategies* of **avoidance, simplification and paraphrasing**. The most important problem seemed to be the **deficient command of vocabulary** - and an insufficient feeling for diversity in meaning and expressions. We found even confusion of words which made some clauses incomprehensible. For instance there was the Turkish word KALORIFER (=central heating) replaced by KARANFIL (= carnation). Problems of a wider range were caused when a boy did not know the word 'rheumatism' and constructed his own understanding by inference changing the term into the concrete word for 'sofa'. This sort of confusion of concepts happened in a very large extent. - We can be sure about our interpretations because we had the material in both languages.

On the whole, many of the bilingual students could understand the original text only to a certain extent. In this context it is very interesting, that they did not complain about the task, and that their teachers did not comment about the degree of difficulty. The students wrote quite a lot down, in both languages, *probably not realizing what they were missing and would need, in order to come to the point of complete understanding and correct retelling.*

To sum up we were able to characterize the developmental differences in each of the monolingual language groups and we could also identify the possibilities of writing of the foreign language learners in their early stadium. However we had enormous problems to describe in clear contours the language proficiency of the bilinguals on the basis of the written texts we have analized. The retelling of the returnee group differed significantly from all other text groups but showed similarities in their own two versions, i.e. Turkish and German. A typical feature was their predominant oral language style put down in a written form. The story seemed to be understood only very vaguely and by reproducing it some unimportant features were described while important points and the sense of the whole story was often missing. There was also very often the problem of choosing the suitable word.

In search for the reasons for this specific language performance of the bilinguals we think of their schooling experience. It has undoubtedly predominantly been 'mother tongue teaching' in both countries - based on the tradition of each society. And in this respect we can find clear effects of misleading. An example is the transfer of the German spelling rule prescribing to write all nouns with a capital letter in the beginning. The bilinguals applied this principle also in their Turkish text, however inconsequent in both versions.

Our bilingual students basically did not mix the languages on the linguistic performance level, but they transferred the underlying rules they had learnt for spelling, complex syntactical structures and text production. And they lacked the feeling for the differences between oral and literary language use. They had no strong knowledge about language standards, and, what is worst, they did not know what they were lacking and whom to ask for help. Teachers who are bilingual themselves can help in socio-psychological respects and if they have the command of the languages of their pupils they can also give a hand on the intuitive level. But what we need is a professional approach!

8. Consequences for Language Teacher Training

The term *double-semilingualism* is often used to describe the situation of bilinguals with low achievement at school. This concept stimulates an understanding in a quantitative dimension and leads to the idea, that just adding the other 50% of each language by remedial measures would help the bilinguals to solve their problems in making double-monolinguals out of them. In that context the goal and the actions are defined in the framework of language education traditions.

In my study I tried to show, that the abilities of bilingual students should not primarily be evaluated as proficiency deficits realized in two codes, but should be seen as a whole with a specific character. Consequently the term *semilingualism* turns out to be **misleading**, instead of just offering the other half (which ?) we must think about more adequate approaches with new paradigms for *developing language proficiency in two languages at the same time and on the same level.*

An educational setting for language teaching should serve the genuine bilinguals as well as those students for whom bilingualism and the command of even more languages is a goal, and the very 'normal' monolingual ones. In this respect the presence and the future demand major changes. Our vision for the teachers can be transmitted best when we call them *'language learning adviser'*.

The professional skills of the new type of teachers must include command about more than one language, metalinguistic knowledge to a high extent and expertise in language ability diagnosis. They must have access to language material as comprehensible and motivating input' learning devices and other methodological helps to be able to advice students and enable them to proceed in their learning process step by step. They should know as much as possible about natural language acquisition and guided instruction principles, and be informed about the specific character of the relevant regional languages to create individual learning programs for their pupils.

In terms of our traditional professional language teaching disciplines this field of study is situated somewhere in between mother tongue and foreign language instruction, enriched by the element of comparatism.

For our new rationale objectives of language teaching must be *reviewed* and *newly defined*. For instance the importance and the methods of teaching the spelling rules of German may be seen in a new light - up to now they have a high rank in mother tongue teaching and a low one in foreign language teaching.

The training for this new type of *process - oriented* and *learner - centered* ***'language education consultant'*** has to follow this line and therefore essential changes in the established syllabus will be necessary. The academic institutions shall have to recognize this dimension as their own task. That implicates a turn from producing *subject specialists* to preparing *agents for developing students language learning potentials*. Of course there will not be all university study elements invalid, but what is important is the **change of the focus.**

Under these auspices, bilingualism and using more than one language should no more be regarded as the exception but the rule. I think this argument may be accepted generally since even those multiethnic states which are interested in strengthening their official language have to deal with the different mother tongues of their people, and, moreover, no national educational system can any more neglect the global importance of the English language. (The case of the persons with English as their mother tongue may be regarded as exceptions in this context.)

Hopefully our arguments will stimulate a great number of research-studies in the near future. In this paper I can only highlight some important points of interest There will be certainly such topics like:

- principles of language acquisition and consciousness
- concept learning and language(s)
- implicit and explicit teaching and learning

- implicit and explicit (declarative) knowledge
- syntactic structures of language(s)
- the role of grammar instruction and focus on form
- lexicon networks and the acquisition of vocabulary
- different letter systems and national spelling habits
- composition writing traditions.
- literature etc.

All these objectives are to be treated under didactic and linguistic aspects including aspects of comparison. The list is definitely incomplete. However in the context of this paper we concentrated mostly on the preconditions and tried to initiate a new approach.

References

CUMMINS, JIM, 1991, Conversational and academic language proficiency in bilingual contexts, in: AILA review 8, p.75-89

JACOBSON, RODOLFO and Christian Faltis, 1989, Language Distribution Issues in Bilingual Schooling, Multilingual Matters 56, Clevedon de JONG, JOHN H. A. L., 1992, Assessment of language proficiency in the perspective of the 21st century, in: AILA review 9, p. 39-45

SCHWENK, HELGA, 1988, Das Sprachvermoegen zweisprachiger tuerkischer Schueler, Tuebingen (392 pages)

SKUTNABB-KANGAS, TOVE, 1981, Bilingualism or NOT: The education of minorities, Multilingual matters 7, Clevedon

STUBBS, MICHAEL, 1990, Language in education, in: Collinge,N.E. ea., An Encyclopaedia of Language, London and New York (Routledge), p.55 1 1-589

APPENDIX

Abbreviations

MYT	Monolingual Younger Turks
MYG	Monolingual Younger Germans
MOT	Monolingual Older Turks
MOG	Monolingual Older Germans
BESt	Bilingual Education Students' Turkish Text
BESg	Bilingual Education Students' German Text
Rt	Returnees Turkish Text
Rg	Returnees German Text
GFLS	German as a Foreign Language Student
RCS	Remedial Class Student

RESULTS in % of the QUANTITATIVE ANALYSIS:

mistakes

spelling	5 Rt	1 MYT	2 MOT	1 BESt	
	5 Rg	6 MYG	2 MOG	1 BESg	8RCS
grammar	2 Rt	0MYT	1 MOT	0BESt	
	3 Rg	1 MYG	1 MOG	4BESg	1 RCS
expression	4 Rt	3 MYT	1 MOT	1 BESt	
	4 Rg	4 MYG	1 MOG	5 BESg	3 RCS
content					
quantity of	42 Rt	41 MYT	38 MOT	51 BESt	
reproduction	41 Rg	32 MYG	49 MOG	32 BESg	22 RCS
completeness	79 Rt	98 MYT	100 MOT	100 BESt	
	84 Rg	*80* MYG	100 MOG	*76* BESg	28 RCS
mentioning of	68 Rt	*78* MYT	71 MOT	100 BESt	
the moral	*64* Rg	*29* MYG	*69* MOG	50 BESg	14 RCS
reporting	*55* Rt	44 MYT	61 MOT	61 BESt	
the excursus	*40* Rg	*32 MYG*	*61* MOG	19 BESg	0 RCS

PREPARING TEACHERS FOR SCHOOL REFORM: UNRWA EXPERIENCE

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1. INTRODUCTION

Following the Arab-Israeli Conflict in Palestine in **1948**, the sudden arrival of some hundreds of thousands of refugees in the Arab neighboring countries (Jordan, Syria, Lebanon) created such a very large number of urgent relief problems (food, shelter, health care). Although provision for Education was not formally part of the programme of the United Nations Relief for Palestinian Refugees (UNRPR, the predecessor of UNRWA), efforts were made in winter **1948/49** to provide some welfare and assistance to the children among refugees. International voluntary and religious organizations served as the operating agencies for UNRPR in the field of education, and with funds from UNESCO to the amount of **$ 38,000** in **1949** together with the voluntary organizations own contributions, the first classes for refugee children began in the refugee camps. The very first classes were held under the open sky, without desks, blackboards, copybooks or pencils.

By **Ist May 1950**, The United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA for short) was created by the UN General Assembly under Resolution **302(iv)** of **8 December** 1949, as a result of the Report of the United Nations Economic Survey Mission (the Clapp Mission) for the Middle East UNRWA is a subsidiary organ of the United Nations General Assembly, directed by a Commissioner-General who is appointed by the UN secretary – General and is directly responsible to the General Assembly.

The main function of UNRWA is to provide basic services of Relief, Health and Education to the Palestinian refugees who were distributed in Jordan, Lebanon, the Syrian Arab Republic and the Egypt Arabic Republic, these countries are known as "host" countries.

In that same year, an agreement was reached between UNRWA & UNESCO to the effect that the latter will take over the technical supervision and guidance to the educational programme through the secondment of a group of international specialists from UNESCO to work with UNRWA and to take over the management responsibilities of the programme.

When UNRWA took over from UNRPR, **64** schools were established, employing 730 teachers and providing elementary education for 3363 children, in the proportions of about (3) boys to (1) girl. Even during this period, the importance of vocational training was recognized and some assistance was provided to refugee students to attend universities.

From these small beginnings in elementary level general education, in vocational training and in higher education developed the UNRWA/UNESCO education system for the Palestine Arab Refugees. Today, the educational services provided by UNRWA/UNESCO for the Palestinian community are comparable to a national system of education for a population of **436043** in **643** schools (of which **49%** are females), **8** vocational training centers with a capacity of **4600** training places, **3** colleges of

education with a capacity of **900** training places in the par ervice eacher ducation nd **600** places for in-service teacher education leading to first university degree.

UNRWA's policy was to admit all eligible refugee children who sought admission to its schools, this has meant building and/or renting more classrooms and employing more teachers to accommodate the annual increase in the school population

Table 1 (P.4) reveals the increase in school population since **1950/51** and up to **1994/1995**. The table also reveals a significant increase in the number of student between the years **1950/51** and **1965/66** amounting to **343%.** This marked increase in school population resulted in the increase in demand of teachers to be employed in the Agency schools regardless of their professional & academic qualifications. This eventually led the Agency to develop its education programme through pre-service and in-service teacher training programs which were school curriculum centered.

II. Pre-Ser Vice Teacher Training Programs*.

In the early 50s, the vast majority of teachers in UNRWA schools were unqualified, academically as well as professionally, **79%** had completed less than 10 years of schooling and without any teacher training course. Hence, UNRWA started its teacher training activities to remedy the situation.

The first UNRWA/UNESCO teacher training centers were opened in January 1956, in rented premises, in the West Bank. Two such training centers were opened: one for men offering a 2-year full time post-secondary teacher training course for 20 trainees and the other for women, offering 2 and 3 year full time post preparatory (i.e 9 years of schooling) teacher training courses for 20 trainees.

These 2 centers were considered as a pilot project in teaching training. In the same school year **(1955-1956)**, the Government of Egypt Arab Republic opened a post preparatory pre-service teacher training centre to which UNRWA sent some **321** refugees for training at Agency expense. In **1960**, the UNRWA/UNESCO Department of Education concentrated its resources on an expanded education programme. In the sphere of the teacher training, in addition to the plans for constructing permanent men's and women's centers at Ramallah, training centers in Lebanon and Syria were planned. As a result of these plans, in **1962**, the temporary women's center at Nablus was transferred to the new, permanent buildings at Ramallah with **150** teacher trainees, the centre in Syria was opened in the same year, with **57** trainees, that in Lebanon opened in **1963** with **91** teacher trainees, while the capacity of the Ramallah Men's Centre was expanded to **400** trainees in **1964**. Also from **1961** to **1966** refugee students were once again sent at UNRWA expense to the Government teacher training institutes in Gaza and Cairo.

As a result of the 1967 Arab - Israeli War, some of the teacher trainees from the UNRWA/UNESCO centers in Ramallah were among the thousands who fled to East Jordan. This led to the establishment of two temporary teacher training centers in Amman: one for women in rented premises and one for men in the premises of the Agency's vocational training center at Wadi Seer. These centers were later accommodated in newly built premises in **1971** at Amman Training Center which offers pre-service teacher training and vocational training for both male and female refugee students.

In **1972**, pre-service teacher training was offered at four UNRWA/UNESCO centers, 3 of which were combined teacher and Vocational Training Centers, with a total population of **541** male and **490** female students enrolled in the 2-year and 3-year teacher training courses, which were served by **85** instructors.

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* Twenty-One Years of UNRWA/UNESCO Cooperation in Education 1950-1971.

In the school year **1974/1975**, the policy of the Department of Education continued to be directed to preparing teachers for two levels of the elementary cycle - the lower elementary level which requires class teachers who can teach all subjects in grades 1 to 3, and the upper elementary level which requires teachers with subject specialization to enable them to teach two or more subjects in grades 4 to 6.

Hence, pre-service teacher training continued to produce teachers with particular competencies that will enable them to be effective promoters and organizers of students' learning in UNRWA schools.

By **1993**, nearly **14,500** young men and women had graduated from the 2 year teacher training programme. However, in view of poor labor market and the fact that the government of Jordan issued a new education law which required all school teachers to posses a four-year university degree by **1997,** UNRWA decided to phase out its two-year teacher training programme by reducing the **1992/1993** school year trainees by **50%** and have it phased out in **1994**.

Upon the request of the Jordanian and Palestinian authorities, UNRWA reversed its decision to phase out the two year teacher training programme and decided in October **1992** to upgrade it to 4-year programme leading to first university degree in education. The teacher training sections in Jordan and West Bank were re-titled as Education Science Faculties.

In **1996/1997** UNRWA Educational Science Faculties provided pre-service teacher training to Palestinian refugee secondary school graduates and in-service training to UNRWA teachers. The 4-year pre-service programme granted university degrees in specializations such as class teachers, field teachers such as Arabic, Mathematics and Science and the 3-year in-service programme aimed at upgrading the qualifications of UNRWA teachers (holding 2-year teacher training diplomas) to the first university degree level*.

In **August 1996**, the first group of in-service students graduated with a Bachelor's degree in education in Jordan, accredited by the Jordanian Ministry of Higher Education, whereas in Ramallah the first group of pre-service students have graduated **in July and November 1996** with a first university degree*.

111. Unrwa/ Unesco Institute Of Educa Tion

3.1 Establishment of the Institute

The Institute of Education was established in December **1963** to meet an urgent need of the UNRWA/UNESCO school system for Palestinian refugees who were then living in the Gaza Strip, Jordan, The Syrian Arab Republic and Lebanon. The need arose from the fact that over 90 per cent of the teachers serving in the UNRWA schools were professionally or academically unqualified and did not meet the minimum requirements set for teachers in the elementary and preparatory cycles. This situation naturally affected the quality of education provided to the children enrolled in these schools. The high incidence of unqualified teachers in the UNRWA schools stemmed from the fact that when provision was made on an emergency basis in the early years of the Agency for the education of Palestinian refugee children, the emphasis was on opening of classrooms required from year to year and on finding teachers for these classes regardless of whether those opting for the job had or did not have the necessary professional or academic qualifications. Most teachers recruited did not even have the minimum academic qualification of a general secondary school certificate. Since fully qualified persons were in short supply, the majority of those available were selected to fill administrative and supervisory posts. Moreover, quite a few qualified teachers left to take jobs in other Arab countries where, too, there was an acute shortage of trained teaching personnel.

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* Report of the Commissioner - General / UNRWA, 1994/1995.

* Report of the Commissioner - General / UNRWA, 1995/1996.

1071

To withdraw these untrained teachers from their schools, even in installments, in order to train them through a full-time programme at a preservice training institution would have meant heavy additional expenditure for UNRWA. The Agency was not in a position to meet this additional expenditure. The proper solution was to use methods of learning and teaching suited to a form of 'on-the-job training' or the distance learning approach that did not involve the withdrawal of teachers from their normal school duties.

As the UNRWA/UNESCO schools were operating in four host countries (Jordan, Syria, Lebanon and Egypt), it was found necessary to make an analytical study of the educational systems and requirements of these countries to ensure that the programme of in-service training that would be drawn up would get the approval of the host governments. An inquiry was also made into the professional qualifications of the UNRWA teaching staff with a view to establishing needs and priorities for training.

The first group of **862** trainees was recruited in the autumn of **1964** for a two-year programme of professional training for teachers who had obtained a State general secondary education certificate or an equivalent secondary school diploma, In the following year, provision was also made for a three-year programme for teachers who had not completed their secondary education. The latter programme had a dual objective: to improve the academic background of the teachers as well as to provide them with the professional training.

3.2 Development of programs for Palestinian teachers and other educational personnel: Since the establishment of the Institute in **1964**, its work has expanded considerably, particularly with respect to the types of training programs it has been able to offer. It is convenient to divide this development into four or five phases, even though there is an overlap in these phases.

In the first phase* **(from 1964/65 to 1973/74)** the main preoccupation of the Institute of Education was to provide basic in-service training for elementary school teachers. Two types of courses were organized for this purpose: a two-year course for qualifying elementary school teachers with a full secondary education and a three-year course for upgrading elementary school teachers with qualifications below the secondary level. A total of **3,983** teachers, representing about **80** per cent of the elementary teacher population in **1974/75**, benefitted by these courses. The comparable percentage when the Institute started its operations was about 10 per cent,

In the second phase, which began in **1967/68,** training programs were provided for the upgrading of teachers teaching at the preparatory (intermediate or lower secondary level) covering grades 7 to 9 Three types of courses have been organized for such teachers:

(a) Specialized two-year courses in various subjects taught at the preparatory school level, namely Arabic, Social studies, Mathematics, Science, English, Home Economics, Physical Education, Handicrafts, and Art Education {introduced in 1975/76). An essential requirement for these courses is the completion of a basic elementary course of in-service or pre-service training of two-year duration.

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* UNRWA/UNESCO quarterly Reports, Vol. 1 Jan, 1972 – Dec., 1974.

(b) A one-year professional course for teachers who have completed a minimum of two years of university study, majoring in a subject area related to the preparatory school curriculum.

(c) A three-year course for holders of a general secondary school certificate appointed to teach at the preparatory level.

The total number of beneficiaries from these courses up to the school year **1973/74** was **1,812,** which represented about **85** per cent of the teacher population in that category at that time, compared with less than **10** per cent in **1964/65.**

The third phase was introduced in the school year **1969/70**, when courses for the training of key educational personnel were started such as head-teachers or school supervisors. In that year, a course was organized for head teachers, which was followed in **1970/71** by a course for school supervisors and in **1971/72** by a course for teacher-training instructors teaching in the four UNRWA pre-service teachers-training institutes {Siblin, Amman, Ramallah men and Ramallah women training centers). Later, this category of training courses was extended to include the vocational training instructors. In **1988** the first course for vocational training instructors was started. Since the introduction of this phase of training, **2006** head teachers, **238** school supervisors, 90 teacher-training instructors and **537** vocational training instructors have benefitted from these courses.

The fourth phase or type of training was also introduced in **1969/70** when the first of a series of special or ad hoc courses was started. This was the 'Global Method of Teaching Arabic' course. In 1970/71, a course in art education was offered for the first time. Since then, a number of such special courses were offered to meet the needs of schools in the different host countries where the Institute operates. Such courses include the 'Source Method in the Teaching of the Social studies'; 'Physical Education'; 'Educational Research'; 'Contemporary Mathematics' (for lower elementary classes); 'Teaching of Religion at the Preparatory Level'; 'Course for Teacher Librarians'; and a course in 'Audio-visual Media for Teachers of the Social Studies at the Preparatory Level'. More than 9000 teachers have benefitted from these courses since then.

Another development in the same direction was the introduction of re-orientation or refresher courses, the first of which was introduced in **1971/72** when a 'Reorientation Course for Grade One Teachers' was organized. Since then the following refresher courses have been organized: 'General Refresher Course for Lower Elementary School Teachers 'Mathematics for Preparatory School Teachers'; and 'Contemporary Science for Preparatory School Teachers'. These were all one-year refresher courses, except for the mathematics course, which was organized as a series of seminars spread over a five-year period. Since the introduction of this phase in 1969/70 and up to the end of 1994/95 a total of 4000 educators benefitted by pursuing these ad-hoc and refresher courses.

The enrolment figures in 1995/96 training year, in these four general categories of training programs were as follows:

Basic course for training elementary school teachers	69
Basic courses for training preparatory-level teachers	220
Basic courses for training secondary school teachers (Lebanon only)	16
Basic course for training vocational instructors	15
Courses for training key educational personnel	73
Refresher and special ad-hoc courses	271
	Total 664

As these figures indicate, the main stress now is still on basic/certification courses (elem, prep and secondary) and special refresher courses organized to meet the needs of the schools in the five fields of the UNRWA operation The continuation of basic training course for elementary school teachers after 30 years of the Institute's operation is explained by the facts that, (a) in some fields the output of the pre-service training institutes was insufficient to meet the school. needs of qualified teachers; thus untrained teachers who have to be trained on the job must be employed and (b) some graduates of in service training courses who had also had years of teaching experience, tend to resign their teaching posts with UNRWA for better jobs. Courses for the training of preparatory-level teachers also have to be maintained because of the increasing enrolment in the preparatory grades, requiring the employment of more teachers or the promotion of teachers from the elementary to the preparatory cycle. Moreover, courses for the training of secondary teachers have been recently introduced to meet the needs of the newly introduced secondary education in Lebanon Field.

3..3 Approaches Utilized in Training

The Institute of Education developed the Correspondence Education Approach as well as Distance Education into what is known as the Integrated Multi-Media Approach (IMMA). Primarily, this is an approach that generally seeks to offer education to adults or to old-aged personnel at their work places or at their homes via a number of media susceptible to openness and flexibility and impervious to the withdrawal of beneficiaries from their daily routine of work*. This approach is marked, as well, for the specification it makes of the objective which educational courses seek to achieve and of the techniques followed therein; for the optimum functionality it proposes for both the human and materialistic resources it has at its disposal; and for the serious attention it pays to the relationship which inputs bear to outputs.

This approach combines indirect and direct forms of teaching. The indirect methods consist of:

- guided study assignments
- reference books available in the field libraries
- quarterly journal published by the Institute (Student Teacher Journal).
- closed circuit television
- other audio visual media

On the other hand, the direct forms of training include:

- Periodic seminars.
- Demonstration lessons.
- Supervised actual practice in the trainees' own
- institution.
- Periodic tests.
- Summer sessions which emphasized practical activities .
- Action research.
- Final exams.
- Final assessment visits.

If taken separately, each of the above-listed forms or components cannot be claimed to be an educational innovation on its own. Some of them have been in use for several

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* Al-Nashef, Doc. E2/82, UNRWA/UNESCO, Institute of Education, p.6

1071

centuries, e.g. study seminars, school-vacation courses, correspondence teaching. Other media have been varyingly used for the purposes of in-service teacher training. What amounts to innovation, however, lies in the hitherto unprecedented tradition (established by the Institute itself, an inseparably workable organic unit). As quoted from the Arab countries which have used this approach, their testimony testifies to the fact that it is " an effective pilot approach which involves a lot of creative dynamic efficiency, and developmental susceptibility but only a relatively little costage"*

3:4 Tutorship of the Institute Courses

The Institute of Education adopted 2 kinds of tutorship for In-service courses.

The first kind is the **Course Tutors** who are usually education staff members at UNRWA Headquarters or at Education Development Centers in all fields. These tutors are entrusted the tutorial responsibilities for one or more in-service training courses organized by the Institute of Education.

The second kind **Intermediary Tutors** who are responsible for mass training to meet curriculum changes in host countries. These tutors could either be outstanding Headteachers or subject teachers. They are usually trained by the subject supervisor in coordination with the subject specialist. These tutors- after being trained - take over the responsibility of training other subject teachers either in the same school or in neighboring schools.

The initiation of this kind of tutors came about as the school supervisors cannot cover all staff members in the various subjects. Eventually, intermediary tutors were nominated to ensure the dissemination of the supervisory tasks and responsibilities to the largest group of beneficiaries.

IV. Technical Supervision of Teachers

UNRWA teachers used to be technically supervised by a group of school supervisors where nearly **80** teachers were attached to each supervisor. In **1974** UNRWA established an Education Development Centre (EDC) in each area of its operations.

The objectives of such centers are to plan and conduct, in close coordination with the **UNRWA/UNESCO** Institute of Education and the General Education Division at UNRWA Headquarters in Amman, appropriate educational activities, in an integrated manner, for the improvement of the quality of Education These activities are designed to cover school supervision, in-service training of education personnel, enrichment of the curriculum including the development of AV media, simple functional research, improvement of the testing and evaluation process, library and documentation services for the field education personnel and other education activities appearing in their work plans.

A committee for each subject of specialization is formed in each EDC to help in the planning, implementing, evaluating and follow-up of all activities pertaining to the subject concerned. The detailed tasks of each subject committee are classified under two main broad tasks namely enriching and updating school curricula and improving teachers' professional and academic competencies.

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* Ibid, P. 13

V. Effect of Teacher Training On School Reform

Establishment of the Pre-service Teacher Training Centers, the Institute of Education, the Education Science Faculties and the Education Development Centers have all contributed to having 95% of UNRWA Teachers fully qualified both academically and professionally. In view of such a significant growth of Agency teachers, the following developments in schooling were realized:

- Teachers were well equipped with the various and up-to-date methods of teaching. They have eventually been able to put such methods in function by organizing the teaching - learning process to meet the needs and different intellectual levels of the students.

- Training of teachers - whether pre- or in-service - resulted in the development of teachers as both promoters and organizers of the teaching/learning process, which enabled the students to participate actively in the classroom activities and to express their actual potential and interests.

- Training of teachers has succeeded in creating a staff of educators who are not only interested in teaching their subject matter but are also quite involved in the over-all developmental growth of the students whether psychologically, morally and academically.

- Training of teachers has also contributed to the creation of teachers characterized as initiators and problem solvers to tackle severe educational problems such as prolonged closure of schools in West Bank and Gaza during Al-Intifada through development of self-learning materials to compensate for lost teaching time.

- The Institute of Education has organized training courses for a selected number of teachers in each school in guidance and counselling, health education and library services. All these course were designed to enable teachers to adopt the integrated disciplinary approach in the classroom.

- The impact of both the pre-service and in-service teacher training programme was reflected positively on the achievement of students in host countries having general examination certificates and community college comprehensive exams where the Agency students scored significantly higher than their counterparts in non-Agency schools.

ALTERNATIVE ASSESSMENT AND SUCCESSFUL SCHOOL REFORM: POWER, PARTICIPATION, AND EQUITY

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INTRODUCTION

Schools are symbols of a society's well-being, a mirror of its future, a barometer of its health, and always, the primary scapegoat when things go badly. So when we speak of changing schools—their organization, financial and curricular decision-making, instructional strategies community relations, and assessment—we are not merely speaking of changing a system. We are also issuing a challenge to re-examine and perhaps revise the very values that lie at the core of society. And it is this call which incites the most vociferous resistance but which inspires, in the same breath, the most courageous energy and clearest vision for change.

Of all of the components of schools that we may wish to revise, none is as visible, none as controversial, none as far-reaching as assessment. On an individual level, assessment consists *of* judging the value of a student's performance. But from a broader perspective, assessment is a clear statement about what we expect our children to know and be able to do when they finish school. It has a critical function in determining whether school reform has been successful; Moreover, assessment is possibly the most important school procedure in students' post-secondary lives it is often a gate way either to higher pay and social standing or to lower pay and social standing. It reflects society's deepest prejudices and nurtures its brightest dreams of success.

In this paper, I will begin by contrasting traditional U.S. assessment with what school reformers call alternative or authentic assessment. My primary examples of alternative assessment will be drawn from my study of portfolio writing assessment, in which students are evaluated on the basis of carefully revised work collected over an entire school term Out of this framework, I will then discuss three ways in which alternative assessment is essential to successful school reform:

(a) it supports and models the redistribution of power;
(b) it increases participation through practice at democratic decision-making and greater access to standards;
(c) it provides greater equity through more consistent standards than teacher grading and more valid evaluation than standardized exams

Traditional Assessment

Over the past half-century or so, assessment of U.S. students has come to be based on three accomplishments: (a) "seat time" (spending a certain number of hours in a class), (b) receiving a minimal grade on teacher- or school-made tests of memorized material, and (c) occasional standardized achievement exams which are used to compare students to district state or national norms.

The first two "accomplishments," internal to the classroom, reflect minimal rather than maximal expectations of students. Teachers are well aware that the simple act of teaching does not guarantee that students will retain the subject matter, much less be able to analyze it critically or relate it to prior knowledge. In addition, while teacher-made exams may fit the classroom curriculum better than standardized measurements, teacher grading is notoriously unreliable, and all the more so where there is little collegial conversation about teaching and standards for assessment (Hillocks, 1986).

The untrustworthiness of school transcripts (Have students really learned the material? What does this "A" mean?) was a driving farce behind the proliferation of standardized multiple choice exams the third "accomplishment" on which assessment has traditionally come to be based. These exams are graded according to a pre-established "norm" with scores mapped onto the well-known "Bell cure" Though touted as "objective", standardized exams are haunted by persistent complaints of exclusionary ethnic bias (White, 1985).

Still, standardized exams are easy to administer on a broad scale, reliable, and reap huge profits for their producers. As a result, they have become ubiquitous. information gathered from students' performance is used to allocate resources to programs' to evaluate state, district, and school progress in comparison with national norms, to evaluate teachers, to group students according to ability, and to make decisions about promotion, graduation, college entrance, and policy analysis (Haladyna, Nolen, & Haas, 1991). Such vital decisions are based on exams that few teachers trust' few parents understand, and which devour classroom time and money (Paris. Lawton, Turner & Roth, 1 991).

Teachers' mistrust of these exams is well-founded: most lack content, construct and face validity because they test subskills in an isolated and decontextualized way, directly contradicting what is known about the schematic and organic nature of learning (Shepard, 1991). Furthermore, most of these exams fail to assess students' ability to negotiate meaning in a social context (Hill & Parry, 1994; Street, 1984).

Second, the popular interpretation of low standardized test scores--namely, that they are mainly the result of poor teaching and administration—is flawed. True, there are ineffective teachers and administrators, but much of the test variation between schools depends on factors beyond the schools' control (Haladyna, Nolen, & Haas, 1991). In poorer districts of New York City many schools lack basic books and materials, students sometimes lack classrooms and are forced to study in hallways or locker rooms, new pupils arrive regularly who cannot speak English and whose parents are poor and illiterate. Is it any wonder that these schools perform below the norm?

Moreover, standardized exams have an insidious impact on classroom instruction. Not only are most of these exams incapable of providing information about students' ability to think critically, perform complex problem solving, or work cooperatively, they actually discourage teachers from developing these skills in students (Rothman, 1995). Instruction becomes more "test like" Innovative methods are replaced with multiple-choice worksheets, and projects requiring more complex thinking skills are set aside to prepare students for these exams (M.L Smith, 1991).

Alternative Assessment

One driving force behind school reform is the realization that the skills needed for the global village of the twenty-first century are simply not being transmitted in the current school paradigm. As each country is forced into greater interdependence on other countries memorizing facts and uni-dimensional interpretations of social issues are no longer sufficient Among other things, students need skills in critical thinking, analyzing divergent cultural perspectives on a given issue, and creative problem-solving across cultures (Cummins & Sayers 1995).

What kind of curriculum and assessment will best prepare students to thrive in the future and make a positive contribution to society? Though reformers differ on whether "excellence" is a societal or an individual goal (Willie, 1987), all agree that "seat time" is no longer enough. They want schools to be accountable for students' learning outcomes. They expect students to perform according to certain standards before receiving credit.

To this end, educators have developed assessment integrated with curriculum rather than external to it, so that "teaching to the test" supports, rather than undermines, classroom learning. Such *authentic* or pragmatic assessment (Hill & Parry, 1994) can include such things as portfolios, journals, learning logs, group or individual projects, interviews, and checklists, either in combination with or replacing more traditional tests. Alternative assessment is educative, giving specific information to students who will be judged by it, "providing both models and implicit criteria" (Wiggins, 1991, p. 19) These criteria must reveal the basis of the community's judgment (Eisner, 1993), so that students can learn from them.

Why is it so important that students understand community standards? To take the example of writing instruction, standards often become the sub ject of a guessing game, with students relying on the teacher's cryptic comments on their paper or on essay models to "get it right". They are rarely taught to examine their own papers in view of the criteria by which their writing will be judged and to write accordingly. Community standards have long been seen as the exclusive property of the teacher or administrator, but researchers are realizing that students need practice applying them to their own writing in order to internalize socially constructed norms.

In fact, success in acquiring writing skills (and by extension, other language skills) seems to be contingent on access to these norms. In an exhaustive literature review, Hillocks (1986) found what he categorized as four approaches to teaching writing:

(a) presentational--traditional, teacher-centered, specific goals pertaining to rhetorical techniques; teacher lecture and feedback; study and imitation of models.
(b) natural process--general goals, e.g., of fluency, revision and drafts; peer feedback; freewriting; high student interaction
(c) environmental--specific goals, e.g., to increase the use of specific detail; students engaged in specifiable subprocesses important to writing; structured, task-centered small group work; students using criteria to evaluate writing.
(d) individual--instruction through tutorials and programmed materials (pp. 116-128).

He found that the students in environmental classrooms actively engaged in the use of specific criteria in self- and peer-evaluation, synthesis of ideas, and generating information, were judged to be better writers. Merely telling students about good writing, showing them models, or even giving them unfocused practice were not as successful

The portfolio,[1] one popular form of alternative assessment, is a collection of a student's best work over a period of time, consciously chosen and prepared for a reading committee. Although portfolios are currently used across the curriculum, I will focus my attention on the portfolio as it is used to assess writing. Typically, students work on a number of written pieces revising them over the semester, and then finally choose certain ones to include in the final portfolio. Also common is the "cover letter" in which students reflect metacognitively about their learning and their choices.

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[1] In the U.K., portfolio assessment is also known as *coursework assessment* (Scott, 1991).

I would now like to describe the setting for my own study of portfolios, which I will use below to illustrate some of the principles and practices of alternative assessment (C.J. Smith 1994). I looked at a portfolio program in a large, urban two-year college in the U.S. (pseudonymously referred to as Magna), fashioned after Elbow and Belanoff's model (1991).

The program at Magna began when some English as a second language (ESL) writing instructors wanted to find an alternative to the timed essay exam used to exit their students into regular composition classes. The exam asked students to write an argumentative essay in 50 minutes on a topic they had never seen before, had never discussed, researched, or written exploratory drafts about—all things these teachers valued in their writing classrooms. Consequently, they turned to portfolios as a more valid and educational assessment instrument.

After receiving permission from the administration Magna began with a pilot study of ten teachers. To inform themselves, they discussed articles about portfolios and invited guests from established portfolio programs. When they gathered to grade midterm portfolios, they evaluated sample portfolios from their classes as "pass" or "fail" Then, they reflected together on the criteria which had most influenced their decision These criteria were gathered into a guide, revised, and tested again during the final evaluation (see Appendix A for the criteria guide).

Currently, final portfolios in Magna's program contain three revised pieces of writing (for advanced students' at least one piece must be expository); two timed in-class essays (written with no collaboration and used as a check on authorship); and one cover letter explaining thewriters' choices and what they have learned. Midterm portfolios contain a cover letter, one revised piece and one in-class piece. Midterm portfolios are not graded; instead, the criteria guide is used to give students feedback on specific aspects of their writing. Final portfolios are graded pass or fail using the bottom portion of the same guide, with feedback optional.

Teachers of the same level of ESL gather for a lengthy (two to three hours) norming session before midterm and final grading periods. They each bring a couple of portfolios to discuss with the group to anchor the criteria guide in real writing. Then, each teacher divides up his or her portfolios among the other teachers for an initial "outside" reading. The outside reader completes one side of the criteria guide[2], turns it over, puts it back into the folder, and then returns the portfolio to the classroom teacher for a second, independent reading (i.e., the teacher reads and evaluates before looking at the outside reader's evaluation). Discrepancies are decided by a third reader.

I observed and recorded one final norming session with three experienced portfolio readers, then asked them to tape-record themselves "thinking aloud" as they evaluated six portfolios individually I then analyzed the tapes to discover how these readers established standards during their norming session and how they applied them in actual assessment.

Having contrasted traditional and alternative assessment, and having explored one model of alternative assessment in more depth, let us now turn to the question of how alternative assessment can contribute to successful school reform

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[2] The Criteria guide found in Appendix A is duplicated on both sides of the paper.

Alternative Assessment and Successful School Reform: Issues of Power

All change involves a realignment of power. Change in power means change in how decisions are made, who makes them, and the consequences they carry. How can alternative assessment prepare teachers for shifting configurations of power in school reform? I would like to suggest three ways first, alternative assessment itself exemplifies this change in power; next it forces teachers to look to themselves, rather than experts, for solutions; finally, it gives teachers practice at group decision-making and consensus-formation.

Alternative assessment itself radically reconfigures power relations, with standards-setting taking place primarily among teachers rather than administrators or commercial test-makers This shift does not go unchallenged. In the case of portfolio assessment, C.A. Smith (1991) notes that the three most common objections stem essentially from issues of authority and control: (a) the fear of plagiarism' (b) the need to know what students can do on their own, and (C) the lack of consistent standards among teachers.

As Smith points out, the question of plagiarism belongs more to a test-like setting than to a writing process classroom' where teachers know their students' work because they have seen its evolution and commented on the drafts. Likewise, if writing is collaborative and social, the knowing how students use others' feedback is at least as important as knowing what they can do on their own. Finally, the lack of consistent standards among teachers is a problem where they teach and assess in isolation from one another but not where teachers are in constant conversation about standards Smith comments that.

Objections to portfolio assessment are objections to investing authority in classroom teachers. . . The subtext of the three [objections] . . . seems to be that the purpose of exit testing is to provide an external, higher authority to check up on teachers or to check up on students . . . By using portfolios . . . we would acknowledge that teachers are authorities about the work taking place in their own classrooms, that collaboration encourages the development of writing ability and of effective teaching, and that learning to write is not a matter of passing tests but is a lifelong process. (pp. 289, 291).

But alternative assessment is more than simply a model in the reconfiguration of power. It provides teachers with greater responsibility and professional autonomy. Teachers are often trained to look to outside "experts" for "solutions". Reinforcing this myth, state-mandated school reform has often supported teacher *professionalization*, which usually means adherence to more and more complex state requirements, and being subject to greater state control.

However, researchers in systemic change have demonstrated that solutions to existing problems are most often found by the members of a system, not by outsiders (Deal, 1986). Real teacher *professionalism* (not professionalization) occurs when teachers are given more freedom and more responsibility by the state, not less, and when they are allowed to participate more fully in democratic processes' critical analysis, peer review, and decision-making related to their classroom (Darling-Hammond, 1987). How can teachers lead students to do critical thinking if they are not encouraged to do so themselves?

Occasional "professional development" workshops cannot accomplish this goal because they have Little connection to the classroom and teachers' day-to-day needs (Little, 1994).

Alternative assessment, on the other hand, engenders reflection, continuous input, and hands on instruction directly related to classroom practice. And, at the same time as teachers are taking more responsibility for their professional development, they are also relinquishing more of the responsibility for learning to their students. The self-reflective and collaborative experience of alternative assessment can help a teacher to face these changes, process them, and incorporate them (Weinbaum. 1991).

Furthermore, alternative assessment provides teachers with experience at democratic consensus-formation. This experience is often lacking in *school-based management* models of reform, where decision-making is simply shifted downward in the organization. Real change in this paradigm is unlikely because the new "decision-makers" lack the training needed to meet their responsibilities.

Extrapolating from a study in the private sector, Wohlstetter, Smyer, and Mohrman (1994) found that schools successful in redesign used *high involvement management*. Teachers and administrators were not merely given more power to make decisions; they were trained and empowered for their new decision-making roles, and they regularly received the data necessary to make informed decisions.

Below is an illustration of consensus-formation from my study of the three Magna teachers. They are in the process of discussing sample portfolios as they remind themselves of community standards for assessment (the norming session). These readers, pseudonymously called Anne, Bob, and Cathy, are discussing a weak portfolio by one of Cathy's students.

In these excerpts, I would like to focus on the group's response to the conflict Cathy experiences at failing a hard-working student. As we shall see, the group makes concessions for her, not by lowering standards, but by supporting her and allowing her to express her frustration and disappointment At first, everyone's comments are positive.

Anne: If you want to compare his writing to the other person's, he has more intellectual sophistication.

Cathy: And he's more of a pusher, I mean he's willing to explore ideas, he's more of a risk-taker, he's—he's willing to try to learn the rules.

Anne: He's trying to do harder things.

Cathy: He is trying to do harder things.

Bob: I'm impressed by the fact that in his earlier drafts that he- {Anne: It's a kind of independence.] that he would change something completely, and say, "All right, I want to see this differently' and really rewrite it.

Cathy: He's a real plodder.

As the conversation continues, two things become apparent: the student's weak language control and Cathy's difficulty at failing him. By initially focusing on the student's strengths, Bob and Anne identify with and acknowledge her conflict. Once this "group work" is done, Bob is the first to venture a negative comment on which consensus will eventually be built.

Bob: Even though it's not—it doesn't always end up to good effect, I'm impressed that somebody would take—would make those changes.

Anne: That's the strong thing about him.

Cathy: The weak thing, of course, {is his language. Anne: {The weak thing is the lack of experience with English that he- I know that he hasn't been here that long.

Cathy: He's good orally and willing to put himself out there {Anne: Very well. Very well.] and he's a good student.

With Cathy still weighing the student's strengths and weaknesses, Bob points to the critical factor the extreme variability in the student's control of English. The others concur.

Bob: It seems var--quite variable to me, like the language shifts from being pretty clear and accurate to-

Cathy: That's exactly right, where all of a sudden you have a sentence that doesn't make any sense, but then that's contrasted with a really sophisticated and nice sentence...

Anne: There were places in here where I saw the problem he has where things can fall apart and you just can't get it [Cathy: I know]...

Anne: Well, here in the first paragraph:... *Therefore, speaking English with accent doesn't shed and also not consider as issue.*

Cathy: That's right, that's not English. Yeah, that's not English.

Cathy's perspective and her knowledge of the student are valued, her own values are respected, but they are balanced by community norms. Nonetheless, her struggle, so familiar to teachers, continues after the norming:

I don't think it's passing either, and I hate to be the one to tell him that.

There is no "happy ending" to this discussion. The portfolio failed, and Cathy had to tell the student. The social construction of knowledge is a messy process. In the words of Peter Elbow (1991), it is "the sweaty work of ... compromising with other live bodies who disagree" (p. xi). Though Cathy values hard work, she agrees that a certain threshold of language competence is also required. Reaching a consensus means that each participant agrees to sets aside, for a time some personal values, in exchange for those principles everyone can agree on.

Unity is the goal, not uniformity, and so when all is said and done, each reader's unique perspective will remain, balanced by the common ground established through conversation. In consensus-formation, teachers can experience a microcosm of democracy, if each voice is valued, allowed to enrich the group conversation, given equal consideration. and yet is balanced by (not obliterated by) community standards. In the words of Condon and Hamp-Lyons (1991):

We had...to find a way to incorporate that diversity, once recognized, into our collective definition so that we could preserve our richness, which we recognized as a strength of our program, while continuing to serve our students' needs. Working with portfolios helped us move toward agreement, and the agreement, as we defined and refined it, helped us read and interpret portfolios. (p. 239).

Alternative Assessment and School Reform: Participation

Participation in standards-setting, closely related to issues of power, is another vital contribution of alternative assessment to effective school change. The norming sessions described above are a first stage in increasing participation. Teachers might begin the term with a thorough discussion of classroom and assessment goals, have a "refresher" discussion mid-way through, and finally, participate in a thorough "norming" session before final assessment begins.

The large chunks of time required for consistent teaching and assessment also serve to support teacher development throughout the process of school reform (Cambone,1994).

Moreover, this process functions as an informal feedback loop for taking stock of the process of reform (Are these still the standards we wish to hold students to? Are we and our students achieving our goals?). All too often, school reform is temporary. Once the state is "off one's back," school culture returns to the status quo Participation by teachers in this internal feedback mechanism helps ensure that reform will continue.

However. alternative evaluation fosters participation in another way: giving students more access to the standards by which their work will be judged. To explore how this takes place, let us look at what we mean by "standards."

Standards of performance elude absolute definition because standards are always set and maintained by a *community* of readers and writers. what Fish (1980) calls *interpretive communities.* It would be difficult to judge writing by the criterion of "clarity" unless "clarity" were defined, illustrated, and agreed upon by a group of evaluators reading a specific group of exams written for a specific purpose The basis of any culture—including the culture of school--is not so much shared rules or knowledge as it is shared interpretations. common sense knowledge of what could be considered. for example, reasonable clarity of expression in writing (Garfinkel. 1986). What is said at a norming session cannot be separated, anymore than in any other conversation from the readers' prior agreement about how the talk was to be interpreted.

I should add that a given interpretive community does not necessary "re-invent" standards In my own study, the readers actually adhered to conservative, academic interpretations of "good writing." But something vital takes place in the norming process. By articulating the standards again in reference to real writing, they concretize the community standards and bring them to the surface of their consciousness. Through what is essentially a metacognitive exercise, the readers refresh their understanding of the criteria and agree on their meaning as applied to real writing.

But how accessible is the standards-setting process of a given interpretive community to students? The benefits of alternative assessment in this regard can be seen most clearly by comparing it with other historical models of language assessment.

In the typical nineteenth model model U.S. education, the interpretive community was open and visible, allowing students broad access to community standards. Graduation and advancement were decided on the basis of oral exams, classroom presentations, and public speeches on matters of social importance (Lunsford, 1986). Language proficiency was not learned in isolation nor for the sole purpose of "minimum competency, but in relation to students personal and professional contributions to society (Halloran' 1982). Uniting community consensus on standards was the public nature of proficiency demonstrations. Students could see, over and over again, how language skills were judged and how the community characterized and valued "effective" communication.

In contrast, the interpretive community is virtually invisible in the model of decontextualized, standardized examinations, developed in the early twentieth century. These exams are put forth as "objective, as though no human agency were responsible for their creation. In fact, human judgment is just as central to multiple-choice tests as to any other kind of assessment, but that Judgment is placed in the background, along with the community which exercises it, to secure the illusion of objectivity. Performance is intensely private, with the standards for assessment jealously guarded or available only through expensive "cram schools". or preparation guides.

Holistic assessment of essay exams, an important precursor to alternative assessment was developed for large-scale use in the 1960s. In holistic reading, evaluators assign a single score to capture overall impressions of a piece of writing. Like the nineteenth century oral examinations, holistic reading emphasizes a public, social construction of standards. In addition it gives careful attention to the functioning of the interpretive community: (a) readers beginning and ending together, (b) a scoring guide based on actual student performance, (c) readers normed by scoring anchor papers and then discussing them, (d) readers re-normed after a long lapse of time and (e) discrepancies of more than one point decided on by a third reader (White, 1985). The advantage of holistic assessment (over multiple-choice exams) is that students are tested on real writing and Judged on the basis of criteria established by teachers rather than test-makers.

However, alternative assessment takes the public, social construction of standards a step further. Students taking a timed final essay exam can look at models, can practice writing an exam under timed conditions, but they can receive no intermediate feedback while actually taking the exam. Furthermore, the essay exams typical of holistic assessment are not representative of what students can accomplish with research, discussion with others, exploratory drafts, and careful revision and editing.

In contrast to timed essay exams, forms of alternative assessment such as portfolios ca help students *internalize* criteria as they examine and critique passing and failing portfolios from previous semesters, work through the criteria guide that teachers use to assess portfolios, use these criteria to evaluate their own and their classmates' work, and decide what to include in the portfolio (Hamp-Lyons & Condon, 1993). At the same time, peer interaction can push students to externalize their criteria, talking about what they chose to include in the portfolio and why with others. By internalizing, articulating, and applying community standards, students gain a fuller participation in their learning that they will need for academic success.

Alternative Assessment and School Reform: Equity

Finally, in addition to contributing to the needed redistribution of power and increased democratic participation in school reform' how does alternative assessment ensure equal treatment of all children? How can what appears to be a highly subjective evaluation be fair? I want to suggest that if certain conditions are met, then alternative assessment can contribute powerfully to the equitable treatment of students through the following. (a) open discussion Of hidden assumptions and (b) the virtual presence of other readers

What conditions must be present in order for alternative assessment to be reliable? Probably the most important condition is lengthy discussion of community standards based on examples of real writing. Researchers in one of the largest portfolio programs in the U.S. Miami University of Ohio) have found that readers can be trained to read reliably and quickly, given sufficient practice and careful training (Black, Daiker, Sommers, & Stygall, 1992. That conclusion was borne out in my own study. In addition to regular department discussions about portfolios informal discussions and memos, the two- to three hour norming session held immediately before final evaluation seemed to play a crucial role in readers' coming to similar conclusions independently of one another.

Other measures can enhance reliability The program in my study required two independent readings of each portfolio, one by the classroom teacher and the other, by an outside reader This validated and incorporated the teacher's expert knowledge about the student's work, but balanced it with the perspective of an "outsider" to the classroom. A simple pass or fail decision further added to reliability. In some cases, exchanging and discussing portfolios between similar programs (via electronic mail, for example) has helped establish reliability on a larger scale (J. K. Wauters, personal communication).

Then, the program I studied did not impose portfolio assessment on its teachers: it was and remains voluntary. The creators of the program began with a small pilot study of a few teachers. Word-of-mouth spread about the benefits of portfolios, and gradually more and more teachers began using portfolios in their classrooms. Teachers' willing participation seems key here given the fact that portfolios involve both assessment and curriculum. Bishop (1991) found that portfolios were much less effective teaching devices where the instructors did not actively integrate them into their course curriculum.

The last condition which I found in my study is difficult to quantify: an atmosphere of trust In a situation characterized by sharply defined power relationships. mistrust, competition, or suspicion, it is difficult to imagine teachers feeling comfortable allowing other teachers read their students' work. Portfolio assessment, in such a situation, could simply replicate old patterns beneath a veneer of change (Condon & Hamp-Lyons, 1991). Unless teachers and administrators are committed to establishing and maintaining relationships of trust and accountability, it makes little sense to begin.

However, if these conditions are present, then forms of alternative assessment have great potential for ensuring equity. First, the lengthy norming sessions can provide an open forum for dealing with some of the more powerful, non-rational forms of resistance, such as the need to grieve the passing of the old system (Deal, 1986). Teacher participation in assessment defuses the feeling of losing control over the environment, which may cause teachers to sabotage the process unconsciously.

Then, alternative evaluation more closely approximates a prototypical reading process, in which readers use their assumptions, prior experience, and cultural values to interpret text. In "objectively" scored exams, whether multiple-choice or essay format readers are supposed to disregard these givers, evaluating "only the text" However, is "anonymous" or "objective" evaluation really possible? Even when instructed to read exit exams in as decontextualized a way as possible, evaluators in Condon and Hamp-Lyons' (1991) writing program still read rhetorically and contextually (e.g., "this student needs to retake the course or "this student is ready for freshman composition).

In another case, this time of one university-wide essay exam for English as a second language (ESL) students' readers performing holistic evaluation are trained, among other things to Read anonymously and avoid cultural/institutional second-guessing" (Troyka, 1982, p. 94) Nonetheless, during the group discussions of sample essays and even during the individual readings themselves (with 2-4 readers per table), I have noted frequent ad-hoc comments about students' ethnic origins based on orthography. It may be impossible for experienced teachers to exclude personal experience from their evaluation completely, since in the natural process of making sense of something, one draws upon all available data.

In contrast to tests which are scored "objectively," alternative assessment opens up discussion not only around readers' differing assumptions about standards of performance, but also around their fears of change and their questions about the process. Assumptions, fears, and questions—the hidden context of so much decision-making—are "out on the table" and can be addressed and dealt with; those kept hidden can have an insidious and deleterious affect on evaluation.

Moreover, alternative assessment supports equity by providing teachers more interaction with other teachers and thus, greater accountability. In my study, the readers frequently indicated their awareness of one another, even when they were alone. By reading one another's students work. they became aware of the others' teaching strategies through writing assignments and feedback. In contrast to traditional paradigms of teaching, they could actually enter other instructors' classrooms, as it were, observing and learning from them.

Along with the growth that accompanies this kind of vulnerability, there is also a sense of intrusion and the threat of judgment. During the norming session. the teachers expressed indirect concern about their comments being on display and being judged. While many teachers are aware that their practice does not always match their expectations of themselves, portfolios put teachers' work (their assignments and written feedback) on display before colleagues, making these discrepancies public and face-threatening.

However, this awareness also reminds them of the standards readers must apply when they are alone. Even in solitary evaluation, interaction continues, anchored in each readers mental image of their consensus, the virtual presence of the Other which impinges on their decision-making. Written feedback, as the most tangible evidence of the other's presence mediates this interaction It acts as a reminder that another person will be reading this text perhaps differently from the way one is poised to do.

Seen in this light, readers' differing perspectives and styles are a strength, not a liability for they serve as a check and balance for evaluation. Readers with different approaches may be less likely to agree with one another simply because of natural similarities. They must rely instead on agreement about criteria worked out through discussion.

CONCLUSIONS

If alternative assessment is to have a lasting impact on school reform in reshaping power structures, supporting participation and access to standards, and enhancing equity, then it must be integrated into pre-service and in-service teacher education programs. Pre-service Teachers need to experience alternatives to traditional teaching and testing before being forced to cope with .the pressures of a new work setting.

In their study of the use of portfolios in a pre-service teacher education program, Jarvinen and Kohonen (1995) found that teachers in the program gained self-confidence, professional autonomy. self-reflective skills and self-knowledge. Portfolios not only contributed to developing self-reflection in teachers, but also to collaboration with others.

The masters program in TESOL at Lehman College (New York City) is experimenting with portfolios in the ESL. methods course. Students are required to write a unit of instruction' to analyze a videotape of their teaching accompanied by peer review, and to observe classroom ecology. The portfolio both taps into and develops an array of communicative, cognitive, and metacognitive skills needed by teachers beyond merely passing exams or writing lesson plans.

Our paradigm of learning and assessment must evolve We need assessment and learning which recognize the social and reciprocal nature of language We need to find ways of assessing student collaboration and problem-solving. We need to take progress into account not just product We need to value, through our assessment model, multiple ways of knowing multiple perspectives on critical issues, and creative ways of addressing these issues. Students and teachers alike must be given the major responsibility for their own learning, along with the institutional support that such growth requires.

We must be willing to face what Lunsford (1988; cited in Anson & Brown, 1991) has called "the ideological freight of our tests." to explore alternatives to assessment and instruction, and to continue to make changes that will prepare our children for the coming century. Not to do so would be unthinkable

References

Anson,C.M.,& Brown, Jr., R. L. (1991). Large-scale portfolio assessment. In P. assessment. & P. Dickson (Eds.), *Portfolios: Process and product (pp.* 248-69). Portsmouth, NH: Boynto Cook

Black, L., Daiker, D. A., Sommers, J., & Stygall, G. (1982). *Handbook of writing portfolio assessment: A program for college placement.* Oxford, OH: Miami University,, English Department. (ERIC Document Reproduction Service No. ED 350 617),

Bishop, W. (1 1991). Going up the creek without a canoe: Using portfolios to train new teachers of college writing. In P. Belanoff & M. Dickson (Eds.), *Portfolios: Process and product* (pp. 21-27). Portsmouth, NH: Boynton Cook

Cambone, J. (1994). Time for teachers in school restructuring. In R. J. Anson (Ed.), *Systemic reform: Perspectives on personalizing education* (pp. 47-78). Washington, D.C.: U.S. Dept of Education, Office of Education Research and Improvement

Condon, W. & Hamp-Lyons, L. (1991). Introducing a portfolio-based writing assessment: Progress through problems. In P. Belanoff & M. Dickson (Eds.), *Portfolios: Process and product* (pp. 231-247). Portsmouth, NH: Boynton Cook.

Cummins, J.and Sayers,D (1995). *Brave new schools: Challenging cultural illiteracy.* New York St. Martin's

Darling-Hammond, L. (1987). Teacher "professionalization versus democratic control. *Basic E Education, 31, pp.* 2-5

Deal T. (1986). Educational change: Revival tent,tinkertoys, jungle or carnival? In A. Lieberman (Ed.), *Rethinking school improvement: Research, craft, and concept* (pp. 115-128). New York: Teachers College Press.

Eisner, E. W. (1993). Why standards may not improve schools. *Educational leadership, 50(5)* pp. 22-23

Elbow, P. (1991). Foreward. In P. Belanoff & M. Dickson (Eds.), *Portfolios: Process and product* (pp.ix-xvi). Portsmouth, NH: Boynton Cook.

Elbow, P. & Belanoff, P. (1991). State University of New York at Stony Brook portfolio-based evaluation program. In P. Belanoff & M. Dickson (Eds.), *Portfolios: Process and product* (pp. 3-16) Portsmouth, NH: Boynton Cook.

Finn, Jr., C. E & Rebarber, T (1992). The changing politics of education reform. In C. E. Finn, Jr. & T Rebarber (Eds.), *Education reform in the '9Os (pp.* 175-193). New York: Macmillan.

Fish, S (1980). is *there a text in the class?* Cambridge, MA: Harvard University Press.

Garfinkel, H. (1986). Remarks on ethnomethodology. In J. J. Gumperz & D. Hymes (Eds.), *Directions in sociolinguistics: The ethnography of communication* (pp. 301-24). New York Holt, Rinehart. & Winston

Haladyna, T M., Nolen, S. B. Haas, N. S. (1991). Raising standardized achievement test scores and the origins of test score pollution. *Educational researcher,* 20(5), pp. 2-7

Halloran, M. (1982). Rhetoric in the American college curriculum: The decline of public discourse. *Pre/Text 3 pp.* 245-270,

Hamp-Lyons, L. & Condon,W. (1993). Questioning assumptions about portfolio-based assessment. *College composition and communication, 4 4(2),* pp. 176-190.

Hill, C. A., & Parry K (1994). Models of literacy: The nature of reading tests. In C. A. Hill & K. Parry (Eds.), *From testing to assessment: English as an international language* (pp. 7-34) London: Longman

Hil locks, Jr., G. (1986). *Research on written composition: New directions for teaching.* Urbana, IL: ERIC Clearinghouse on Reading and Communication Skills and the National Conference on Research in English

Jarvinen, A' & Kohonen, V. (1995). Promoting professional development in higher education through portfolio assessment. *Assessment and evaluation in higher education, 20(1),* pp. 25-36.

Little J. W. (1994). Teachers' professional development in a climate of educational reform. In R. J. Anson (Ed.), *Systemic reform: Perspectives on personalizing education* (pp. 105-135). Washington, D.C.: U.S. Dept. of Education, Office of Education Research and Improvement

Lunsford, A. (1986). The past—and future—of writing assessment. In K. L. Greenberg, H. S. Wiener, & R. A. Donovan (Eds.), *Writing assessment: Issues and strategies (pp. 1-12). New* York: Longman.

Lunsford, A. (1988). *Reassessing assessment: Challenges to the tradition of testing.* Keynote address, Sixth annual conference of the National Testing Network in Writing. Minneapolis, MN.

Paris, S. G., Lawton, T. A., Turner, J. C., & Roth, J. L. (1991). A developmental perspective o standardized achievement testing. *Educational researcher, 20(5), pp. 12-20.*

Rothman, R. (1995). *Measuring up: Standards, assessment, and school reform.* San Francisco: Jossey-Bass

Scott, P. (1991). Step by step: The development in British schools of assessment by portfolio. In P. Belanoff & M. Dickson (Eds.), *Portfolios: Process end product* (pp. 80-92). Portsmouth. N H: Boynton Cook.

Shepard, L. A. (1991). Psychometricians' beliefs about learning. *Educational psychology, 20(7).* pp. 2-16

Smith' C. A. (1991). Witing without testing. in P. Belanoff & M. Dickson (Eds.), *Portfolios Process end product (pp.* 279-291). Portsmouth, NH: Boynton Cook.

Smith, C. J. (1994*). ESL portfolio assessment at the Borough of Manhattan Community College. The creation and application of standards.* Unpublished doctoral dissertation. Teachers College, Columbia University, New York, NY.

Smith, M. L. (1991). Put to the test: The effects of external testing on teachers. *Educational researcher' 20(5), pp. 8-11*

Stiegelbauer, S. M. (1994). Change has changed: Implications for implementation of assessments from the organizational change literature. In R. J. Anson (Ed.), *Systemic reform Perspectives on personalizing education (pp.* 25-46). Washington, D.C.: U.S. Dept. of Education, Office of Education Research and Improvement.

Street, B (1984) *Literacy in theory end practice.* Cambridge: Cambridge University Press.

Troika, L. Q. (1982, November). *An a posterior) examination of the evaluation scale of the Writing Assessment Test at the City University of New York* (Research monograph series report No 3). New York: Instructional Resource Center, the City University of New York.

Weinbaum, K. (1991). Portfolios as a vehicle for student empowerment and teacher change. In P. Belanoff & M. Dickson (Eds.), *Portfolios: Process and product (pp. 206 214).* Portsmouth! NH: Boynton Cook.

White, E. *M* (1985). *Teaching and assessing writing.* San Francisco: Jossey-Bass. Wiggins, G. (1991). Standards, not standardization: Evoking quality student work. *Educational leadership, 4 49(2), pp.* 18-25.

Willie, C. V. (1987). *Effective education: A minority policy perspective.* Greenwood Press: New York

Wohlstetter, P., Smyer, R., & Mohrman, S. A. (1994). New boundaries for school-based management: The high involvement model. In R. J. Anson (Ed.), *Systemic reform Perspectives on personalizing education (pp.* 79-104). Washington, D.C.: U.S. Dept. of Education, Office of Education Research and Improvement.

1090

APPENDIX A
PORTFOLIO CRITERIA GUIDE

Class Level of Portfolio Writer ----------------------------------

Evaluator: Check one
---------------- Peer
---------------- Classroom teacher
---------------- Portfolio Committee

DATE----------------------
Interim review -----------
Final review --------------

Rating system: Based upon expectations for writer's level
1 = Needs improvement; not yet passing for level
2 = Satisfactory; minimally passing for level
3 = Good; more than minimally passing for level

Criteria: In general, based upon expectations for writer's level, the writer of this portfolio

a)	Expresses her/himself clearly (Meaning is clear)	1	2	3
b)	Writes with fluency (length, able to write sustained piece)	1	2	3
c)	Presents ideas clearly (ideas stay in focus)	1	2	3
d)	Organizes and develops ideas (uses support, examples, details)	1	2	3
e)	Shows consideration for the teacher (margins, handwriting, paragraphing, etc.)	1	2	3
f)	Has reasonable control over grammar, punctuation and spelling	1	2	3
g)	Shows ability to appropriately edit and revise	1	2	3
h)	Shows range of writing skill through selection of pieces	1	2	3
i)	Shows reasonable consistency between in-class and out-of-class writing	1	2	3

END OF TERM ONLY

-- PASSING PORTFOLIO FOR THIS LEVEL

-- NOT PASSING FOR THIS LEVEL

IMPROVING PRIMARY SCHOOL TEACHERS QUALITY THROUGH DISTANCE LEARNING SYSTEM (INDONESIAN EXPERIENCE)

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Background and Problems

In facing the challenge of the globalization era, great emphasis has been placed on the development of human resources. It is for that reason that. the government. of Indonesia has launched a nine-year compulsory primary education program. It was expected that through this effort the quality of Indonesian people can be improved so that they are ready -to challenge the ever changing world. To bring this effort into reality, education, especially at primary level play an important role.

To start implementation of the nine-year compulsory education, since 1990 the government requires the primary school teachers to have at least Diploma II (two-year college program) certificate. In addition, they are spread out all over the country and live in a remote areas. In 1990 there were more than 1,5 million teachers whose qualification need to be improved. The main question is, how[1] to involve them in the improvement. program without sacrificing their daily duties.

It's impossible to invite them to attend regular courses provided conventionally in campus, due to the limited capacities of campus and other reasons such as economic, transportation, administrative, etc. The best alternative :is to implement distance learning system, so that they could have opportunity to study while they stay in their residence and continue doing their ordinary job as primary school teacher. To implement this alternative, starting in the academic year of 1990/1991 Ministry of Education and Culture has developed a program for upgrading primary school teachers through distance learning. This program is organized by The Indonesian Open University in cooperation with the Directorate General of Primary and Secondary Education, Ministry of Education and Culture.

Open University (OU)

In 1984, with Presidential decree number 41/1984, the Open University was established as an autonomous state university. It differs from other universities :in that it uses a **distance learning system**. Students are served :in the following ways:

- Registration its administered at the closest regional office of the open university.Prior to that, student has to buy Registration form at the closest post office,
- Student takes subjects of his/her choice;
- Examination is administered twice a year.
- Student. buys learning materials at the regional office of the open university, at book store, or order directly to the central office of the open university via postal service.

- Thus this system provides student with flexibility in accordance with his/her own ability, interest, economy, and time.

The open university was achieve the following purposes:

- to provide high school graduates with a broader learning opportunity.
- to produce specialists and professional manpower in various fields of the national development.
- to improve quality of teachers, educational staff, and other professionals to support the national development.

The open university offers programs similar to other state universities Programs available at the open university are: degree program, non-degree program (diploma, certificate) for various field and specialization.

All of the high school graduates with unlimited date of diploma and unlimited age can be enrolled as the Open University student. System of study in the Open University is very flexible and relevant for everyone, not only those who are ready for self study, but also for younger students and who need more guidance.

Studies in the Open University held with learning materials without existence of the teacher or lecturer. A student can learn by his or herself , together with other OU students in study group, ask to more expert peoples, participating in tutorial activities, listening and watching radio and television broadcasting, doing practice, simulation if needed, and other learning activities through any kind of learning resources. All of above learning activities did under the students inisiatives responsibilities. For the students incentives and the particular difficult courses, student could participate in intensive tutorial at Student Study Center.

Program of Upgrading Primary School Teachers

It has been mentioned before that in order to support the implementation of compulsory nine-years education, primary school teachers should earned Diploma II certificate. For that purpose, distance education system has been developed by the Open University in cooperation with the Directorate General of Primary and Secondary Education, Department of Education and Culture. The program was intended to produce a large number of teachers earning diploma II certificate in a relatively short period of time. The program was considered effective and efficient in terms of budget and organization. Beside that, all teachers stay on their jobs, so not disturb the educational program in primary school. Another benefit :is standardization of the learning materials which should be studied by students, and also will increase student learning outcome.

To implement the program starting the academic year of 1990/1991 the Open University has recruits 20.000 primary school teachers from 27 provinces who financially supported by the government. In addition to that, in the following year the number of teachers recruited were increased by following those teachers who are capable of financing themselves.

1093

Organization and Management

Primary school teachers upgrading program through distance education system is a national. program within the Department of Education and Culture. It was managed from national level, provincial level, district and sub district level. At the national level. the program is academically implemented by the Open University and administratively managed by the Directorate General of Primary and Secondary Education.. The Open University is responsible for managing student registration, provision of learning materials, supervision of tutorials, examination and certification. On the other hand, the Directorate General. of Primary and Secondary Education, is responsible for student recruitment, conduct tutorials, provision of learning facilities and funds, monitoring of management activities, reporting, dan conducting examination.

At provincial level administrative affair is managed by Regional Office of the Department of Education and Culture, and academic affair is managed by Regional Office of the Open University. Meanwhile, at district level, the program is coordinated by the District Office of the Department of Education and Culture. On the other hand, Head of the Department of Education and Culture at sub district level is responsible for the recruitment of students, registration, tutorials, and student organization.

Learning Materials

The learning materials in the Open University are same and equal with the structure and content of courses in the other state universities. The learning materials in the Open University are designed systematically specified to be studied by self, and consist of main textbook in the modules format, audio cassette, references materials and practicum manuals. Beside that, the Open University learning materials also are made in the form of regular textbook, radio and television broadcasting, and practicum kits for science. To keep the quality of the Open University is equal with the other state universities, so all of the modules writers and test developers, are the good quality faculty members from the good standing state universities around the country. They are special hired by the Open University for developing the learning materials as well as the examination tests.

Teaching-Learning Strategies

Unlike conventional system of teaching and learning, there is no direct face to face contact between teachers/instructors and students at distance learning system. A student learns through the use of printed learning materials called module. There are at least four modes of student learning i.e.: (1) individual study, (2) group study, (3) tutoring, and (4) field experience practice.

Individual study. Distance education system relies on individual study as its main strategy. Hence, each student is expected to be independent in managing his/her learning activities. He/she should be able to study the module individually.

Study- in groups. The Open University students are strongly recommended to build a study group with his/or friends to support his/her study. In this group, students could discuss content. of the modules, problems concerning process of learning as well as personal problems. Beside that, the Central Office as well as -the Regional Office regularly sent Reformations concerning schedules, academic calendar, changes of regulations, co and extra curricular activities, etc. to student correspondence.

Tutorials. Tutorials are served particularly to help students overcome their learning difficulties. It also facilitates students to meet their colleague as well as their tutor.

Tutorial activities are held once a week in the tutorial center, usually on Saturday or Sunday. Tutorials are served by the local university faculty members, or other relevant experts such as senior teachers, supervisors, etc.

Field experiences program. It is expected that student will be able to integrate concepts they already learned with his/her own experiences as a teacher. Student brings his/her daily experience as learning resources to be analyzed by concepts they learned from the modules.

Registration And Student Administration

Firstly, student should buy first registration form for new student, and re-registration form for the current student at the OU Regional Office or nearest. Post Office. Then Candidates of student fills this registration form and pays tuition fee in the Post Office according to the direction in the registration form. After filling the registration form, student should bring this form with the needed files to the registration office located at the OU Regional Office. Students who located in the remote area and have difficulties to attend the regional office, can sent the registration file directly to the central office in Jakarta through the Post. Office. Candidates who fulfill requirement, and have paid tuition fee and other fees needed, automatically accepted and enrolled as the OU students. They will be given student card with ID number.

Student academic administration is organized by the OU central office in Jakarta. The regional office and study groups also keep student administrative record.

Examination and Certification

The opportunity to take final examination are offered by the OU twice per registration period and held at the end of semester. Re-examination is done with the same the regular examination. All of the examinations are held in the certain local which has been determined and under the responsibility of the OU regional office. The OU graduates will get the degree and diploma which equal with the degrees from other universities.

Resources

Various resources, such as human, funds, materials as well as facilities are needed for the program to be successfully implemented. Funds are provided by federal and local government as well as by students, private foundations and institutions, cooperative, teachers organization, etc. Local school and university building are used for student learning. Human resources such as tutors, managers, and administrative staff are recruited through cooperation with local universities and other education institutions.

Supervision

Program supervision is conducted both by The Open University for academic aspect and by the Directorate General of Primary and Secondary Education for administrative aspects. The supervision is done through visit to lessening centers, schools, and regional office.

CONCLUSION

Currently there are 252.509 primary schools' teachers enrolled as the Open Universities students spread out all over the country. This program will continue until all primary schools teachers in Indonesia achieve D-II level. In five years period this program has increase a number of teachers who earn D-II level. For example, in the Province of West Java there are 88.792 teachers have earned Diploma II or 73% of total number of teachers in this region.

The implementation of the program encounters the following constraints:

Limited resources such as: financial, learning materials, qualified tutors, management, administrative procedures, library, etc.

Inappropriate study habit of teachers.

Teachers living in remote areas find it difficult to get into study center as well as to the place where examination is conducted, due to transportation and communication constraints.

In conclusion, some advantages have emerged from this program. The number of qualified teachers earning D-II program has increased. This condition will have some effects on the improvement of teachers personal and professional quality, [particularly on knowledge, skills, and attitude aspects. The improvement of quality of primary school teachers will also improve their teaching ability which in turn will result in the improvement of student performance. In brief it can be concluded that this program has success in improving primary school teachers quality, and in improving the quality of primary education.

TEACHER EDUCATION AND THE LIBERAL ARTS: A CASE STUDY OF THE DEPARTMENT OF EDUCATION AT THE UNIVERSITY OF RICHMOND

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The University of Richmond, a small, highly selective, private liberal arts university, has chosen to strengthen and expand its programs in teacher education. This is contrary to national trends in the preparation of teachers, as many elite colleges and universities have either closed or reduced the size of their education programs. Criticized for being pre-professional and lacking academic rigor and connectedness, education departments, particularly within the small, liberal arts university context, have become an "endangered species" on the brink of extinction.

In this paper, the authors illustrate how the Department of Education at the University of Richmond has withstood these challenges through innovations in curriculum, programs, assessment, and faculty development. The research base for the development and assessment of these innovations is the analysis of two five-year follow-up studies with recent graduates of our teacher education program. Our purpose is to reestablish the importance of preparing teachers within the liberal arts and to demonstrate how education departments can constructively respond to their critics within and outside the field of education.

Nearly every school reform report of the last decade has emphasized the importance of a strong liberal arts education in the preparation of teachers (Murray & Porter, 1996). A primary goal of these reforms is to draw intelligent, talented, and well-rounded students into the teaching force. Historically, a primary purpose of small, liberal arts institutions has been to prepare teachers for the schools and ministers for the churches. While many of these colleges and universities still prepare teachers, few would claim the preparation of teachers is central to their mission (Goodlad, 1990). Although the majority (approximately 65%) of institutions who have teacher preparation programs are private, most of our nation's new teachers (approximately 75%) are educated in large public universities (Darling-Hammond & Cobb, 1996). The number of students pursuing teacher preparation within the liberal arts context has declined substantially. As recently as thirty to forty years ago, fifty percent of the student body in liberal arts colleges were enrolled in teacher education programs. More recently, fewer than 20% of the student body in liberal arts colleges are preparing to become teachers (Goodlad, 1990).

The University of Richmond is making a commitment to producing future teachers from a highly competitive, liberal arts environment. The University is a predominately undergraduate institution with a student body of about 3000 and a faculty of 270. Degrees are offered in arts and sciences, business, leadership studies, and law. The student body at the University of Richmond is representative of some of the brightest students in the nation. A goal in the University's strategic plan is to move the University's admissions profile into the "most competitive" category with an applicant pool of 5,000 to 6,000 with a yield of 35%. In addition, the University aims to have an undergraduate minority and international population of 17% by 1990. In short, the University and the Department of Education are well-positioned to be a leader in teacher preparation by drawing from this talented pool of students. The cornerstone of the teacher preparation program in the Department of Education is a broad liberal arts education. Our program orients students to the teacher profession through challenging and responsive course work and field experiences which are well aligned with goals of a liberal arts education. In order to survive and thrive within colleges and universities, teacher preparation programs need to be responsive to the changing nature of liberal arts institutions. An adaptation of Soder and Sirotnik's framework (1990) reveals eight specific recommendations for teacher preparation programs to gain stability and strength:

1. Counter the hegemony of the arts and sciences through multidisciplinary study and integration of programs into the broader academic and social life of the campus.

2. Form coalitions with other professionally-driven schools, such as medicine, law and business.

3. Form coalitions with local schools and the college or university community.

4. Educate the college or university administration of the mission and "modus operandi" of the field of education, including the emphasis on field service, teaching quality, and field-relevant and collaborative research.

5. Provide pedagogical and other professional development training for the broader university faculty.

6. Legitimize and clarify the role of graduate education in the preparation of teachers.

7. Illustrate the effectiveness of teacher preparation programs by tracking the success of graduates.

8. Operate under the mind set of inventing the future, rather than reinventing the past. The Department of Education at the University of Richmond has been responsive to each of these eight areas, and each will be discussed in turn.

Multidisciplinary Study

Several situations have emerged which have led to better integration between the Teacher Preparation Program and the School of Arts and Sciences at the University of Richmond. The Education Department is a department within the School of Arts and Sciences and the state of Virginia requires that all teachers, who are licensed in the State, must have a liberal art major. In essence, there is no major in education in this State. Therefore, all students at the University of Richmond, whether they are preparing to teach in the elementary schools or the secondary schools, are liberal art majors. In addition, the general curriculum of the School of Arts and Sciences requires that every student take a field of study course. Every academic department may propose to have a course designated as a field of study course. The School of Arts and Sciences recently granted field of study status to our introductory course, Perspectives in Education. This course, which draws from a wide range of social science disciplines, such as economics, history, sociology, law, and psychology, satisfies the area of social analysis. Because of this situation, students from other departments may enroll in this course to satisfy this requirement.

Education is also a minor area of study and is open to students of other departments and schools on campus. These students would not necessarily student teach, but they may take a minor in education. Collaboration with other departments is encouraged and at the present time, there are several areas in which this is taking place. The Education Department has a Teacher Advisory Committee which is made up of a contact person in every department which is an endorsement area in the secondary program, as well as some people from the community schools and the faculty of the Education Department. This committee meets twice a year and works closely with updating courses and programs to meet state licensure standards. In addition, the faculty member responsible for the science and mathematics courses works with the Chemistry, Biology, and Physics departments on various grants and projects. Several faculty members are also involved with various interdepartmental agencies such as contributions to the local Sigma XI chapter, and Arts and Science committee assignments, and University service organizations such as the Westhampton Alumni Board, Greek organizations, and the University Fellows.

Coalitions with Other Professional Schools

It is the intention of the Department of Education to strengthen its collaboration with other professional schools. In order to allow students in the Business School and the Jepson School of Leadership Studies to be able to take education courses, the minor in education was made open to them. Though they may not student teach under State law (because they are not liberal arts majors), they may complete education as a minor area of study. There are twenty-two institutions of higher education in the country that have both a graduate program in education and law. Students, who are interested in the field of family and domestic law are increasingly interested in also obtaining a master's degree in education. This past year, we received our first application from such a student. Our intent is to pursue dialogue with the law school to facilitate this type of interaction between programs. In addition to these partnerships.

University/Community Partnerships

In the area of community linkages, the faculty of the Education Department has developed strong ties to the community by serving on advisory boards to local private schools, involvement with staff development within the public schools, and serving on committees in the State Department of Education. The University as a whole encourages linkages with the community and the involvement of students with community projects. These linkages are emphasized in the strategic plan of the University. There are many community-based projects that education students are involved in through an agency on campus, in the School of Leadership Studies, called Learning in Community Settings (LINCS). The LINCS office places students in the community for service projects, tutoring and other service learning opportunities.

The Department of Education has a history of establishing partnerships with community agencies. For the past nine years, the University has hosted the Governor's School for the Gifted which is directed by a faculty member in the Department of Education. More than four hundred students are brought in from secondary schools across the State for four weeks of intensive enrichment programs. A faculty of experts in the fields of the visual and performing arts and humanities teach the curriculum for gifted students.

The University of Richmond has sanctioned a partnership with a local school system and the Department of Education to train all remedial reading teachers for primary school through a specialized Reading Recovery program (originated in New Zealand). At this point in time, all of the teachers in the school system have been trained over a four year period. The Department of Education is presently conferring with that school system for future possible collaboration.

Each year, a local school superintendent is invited to give the opening seminar to the education students in our guest lecture program. This affords students the opportunity to hear first hand what new developments will be taking place in the schools. During the past years, two research projects have been on going in the local schools. One project involves training teachers and students in science methods and applications of technology to classroom teaching. The second research project was in a school for dyslexic students and involved investigating models of dyslexia. This type of interaction is welcomed by the schools and encouraged by the Department.

Informing Administration of Mission and "Modus Operandi"

One goal of this paper is to underscore how the Education Department at the University of Richmond is unique and thriving despite the opposite national trend of education departments in liberal arts colleges and universities. There are two major documents that are produced on a regular basis which inform the administration and the dean about the operation and the mission of the Department of Education. Every five years, a strategic plan for the Department must be developed. This plan clearly states the mission, goals, and purposes of the department for the ensuing five years. Assessment procedures are included to give credence to the formulating of new practices and innovations within the department.

Each year, the department chair writes an annual report to the dean of the School of Arts and Sciences. This report outlines all of the happenings of the past year. Information included is on enrollment and graduation figures, course offerings, research and publications of the faculty, papers and presentations, and any other pertinent information to the department.

An ongoing information source are memos to the administration and to the dean about events in the department. These memos are a source of information about guest speakers, student-faculty interactions, and any new involvement of the faculty and the local schools, State Education Department, and professional organizations. For example, this paper, including the data on the five year follow up study, will be shared with the administration and the dean of the School of Arts and Sciences.

It is one of the primary duties of the chair to inform the Dean about major concerns in regards to grant availability and funding policies for the faculty, the unique nature of research in the professional field of education, and faculty involvement with local school divisions and other community agencies. This is not an area in which the department has been very successful in carrying out due to the differing nature of education and the arts and sciences. A goal would be to work out a schedule for contributions which are worthy in this field, that is mutually agreed upon between the administrators and the education faculty.

Professional Development for University Faculty

The Education Department recognizes the importance of becoming a resource to the faculty of the University. Our faculty has collaborated with instructors in psychology to provide seminars for the broader University community. Our guest lecture series, which brings prominent scholars and practitioners to the campus, is open to all members of the faculty and interested members of the Richmond community. The challenge is to the members of the Education Department to continue to make progress in this area so that expertise in teaching and scholarship is shared.

In addition, the University has established a center for housing professional development resources for faculty. The Program for the Enhancement of Teaching Effectiveness (PETE) will be expanded in the next five years to support new teaching initiatives that foster students' active engagement in learning. A priority for the Department of Education is to become actively involved in the professional development activities of PETE, both as participants and providers of faculty workshops. PETE provides mini-grants to faculty to initiate instructional innovations within their classes and to attend conferences that will improve their teaching. Several faculty members within our Department have taken advantage of these resources and are in the process of designing professional development activities that will be of value to the University as a whole. The conceptual linkage between PETE and the Department of Education is a natural one and we are looking forward to expanding and strengthening this relationship.

Legitimacy of Graduate Study in Education

Masters of Education (M.Ed.) programs have always been a part of the Department functioning and their importance has been conveyed to the administration. Our M.Ed. students provide a vital link to the local schools systems and their professional perspective strengthens our Department. They also afford an opportunity for preservice teachers to gain an understanding of the internal workings of the field. This does not happen as readily in programs that are not connected to graduate programs. An M.A.T. degree became part of the program five years ago. This program is qualitatively different than the M.Ed programs in that it accepts students who are not licensed to teach and the students simultaneously become licensed and receive a masters degree. The M.Ed programs accept only licensed teachers and they enroll in coursework in statistics and research design. The M.A.T. degree also provides the opportunity for our undergraduate students to obtain a terminal masters in a five year program. This program has been particularly valuable for some of our most talented students who, due to other academic commitments on campus (e.g., double majors, studying abroad, etc.), need additional time to complete required course work and practicum in education.

On the graduate level, the Master of Humanities (M.H.) degree allows students to earn a concentration in education. This program does not prepare teachers to teach but rather introduces to the educational field in a manner which is enlarging the humanities area. In a predominately undergraduate institution, we are fortunate to have stable and growing graduate programs in education.

Illustrating Effectiveness in Preparing Educators

The teacher Preparation Program at the University of Richmond has evaluated the program over the last ten years by sending a survey to the graduates, at five year intervals. Every graduate from the University, who has completed the teacher preparation program, is sent this survey. The survey consists of six parts which are to be completed by the graduates and returned to the Department of Education. Part one requests background information on degree, teaching position, currently teaching, grade level, and type of position (regular or special education). Part two lists seven points concerning professional development and requires respondents to indicate if they had a positive influence of them in the teacher preparation program. Part three concerns personal growth and well being. Respondents are to indicate if statements expressing attitudes and philosophies are essential to professional growth. Respondents are also asked in this section to indicate if these essential items were part of their experiences in the teacher preparation program at the University of Richmond. Parts four and five are constructed the same way. Part four asks questions pertaining to the skill and knowledge base necessary for teaching and part five questions the strength of areas of preparation. The answer format is a four item Likert scale with bipolar choices from strongly agree (1.0) to strongly disagree (4.0). The narrative section of the survey asks open ended questions dealing with suggestions on what would improve the program and what was found to be most helpful in the program. (Further information and data summaries on the survey are provided in the appendices).

The five year follow-up study was sent to graduates from the teacher preparation program for the years 1986-1990. The information from this survey is summarized and attempts to shape the program to conform to the suggestions of the students have been taken in the ensuing five years. Fifty-eight students responded to the survey. Factors in Teacher Preparation, which consistently received the highest ratings were: a) faculty competence; b) class size; and c) the student teaching experience. These aspects of the program apparently were important to creating a favorable perspective of the program and contributing to the meaningfulness of their experiences. Factors receiving a low rating were: a) field experiences other than student teaching; b) courses constituting the General Education requirements of the degree; and c) contact with the office of Career Planning and Placement. This office, although offering an excellent service and opportunity to students appeared to be an indirect experience at the time.

A summary of Effective Preparation of Teachers, indicated that students ranked very satisfactory in a) meeting classroom responsibilities; b) working with peer teachers; and c) effectively interacting with students. An examination of factors ranked low indicated that graduates thought the teacher preparation program should be reviewed closely to find more effective ways to deal with: a) classroom management skills; b) multiculturalism; and c) special education or handicapping conditions.

The narrative section of the survey also underscored the need to include more information on classroom management skills, multiculturalism, and special education populations as well as more instruction in technology. The responses were evaluated by the faculty of the department and attempts were made during the succeeding five year span, to implement some of the elements that were highlighted in the graduate responses. The Department initiated changes in the areas of course content, field experiences, and career Planning and Placement contacts. Subsequently, both classroom management and special education courses were included for those students desiring to minor in education. In addition, information on attention deficits was added to basic courses.

A staff person was hired to coordinate all field experiences and the experiences were revised to include as many as possible. Personnel from Career Planning and Placement addressed the students at designated times to increase the contact that students would have with that office. A major effort was taken to implement technology in all our classes, as well as require a course in computers in the classroom for all education students. At this point in time, there is a computer lab classroom and a second computer work lab is being developed. Material on multiculturalism has been developed and added to some classes. More needs to be developed in this area.

The second five year follow-up survey was sent to graduates in July 1996, for the years 1991 to 1996. Forty nine graduates responded to the survey. Information in the narrative section was divided into three sections, helpful aspects, suggestions, and demographic data. Helpful aspects and suggestions were then grouped according to responses. Responses in the three strongest categories for helpful aspects are as follows: students teaching (30 responses); field experiences (10 responses); and methods courses (8 responses). In the category of suggestions, the four strongest responses are: need for more special education course work (7 responses); need for more coursework in classroom management (7 responses); more reading coursework (5 responses); and more coursework in methods (5 responses). Two responses or less were found in the remaining areas.

The data for sections two through five were analyzed in two ways. Means were run for questions 21 to 86 to determine graduates' general assessment of the importance of and preparation in specific teaching areas. Correlation coefficients were obtained for selected questions to determine if there were discrepancies between what graduates viewed as important items in their profession and how graduates felt they were prepared in these items through their courses at the University of Richmond. These means and correlations pertain only to those graduates presently holding teaching positions. Highlights of the findings are provided here and complete data summaries are provided in the appendices.

The lowest mean responses (i.e., graduates "strongly agreed") were found for questions #22, #23, and #25.

22. Viewing learning as a lifelong process is essential to my professional growth and well being (1.05 mean response).

23. Developing a respect for all persons and their potentials is essential to my professional growth and well-being (1.14 mean response).

25. Approaching my entrance into my career with energy and optimism (1.14 mean response).

No mean responses on any item was greater than 2.51, indicating that graduates did not "strongly disagree" with any of the statements. A mean response between 2.0 and 3.0 indicates an overall assessment between "agree" and ``disagree." The highest mean responses were found for questions #70, #78, and #86.

70. My education at the University of Richmond prepared me to maintain accurate and organized student progress records (2.31 mean response).

78. My education at the University of Richmond prepared me to use appropriate technology in all subjects (2.32 mean response).

86. My education at the University of Richmond prepared me to use technology as a professional support tool (2.51 mean response).

Correlation coefficients were tabulated for selected items in the survey. Highest correlations were found between questions 43 and 65 (developing instructional objectives) and questions 45 and 67 (developing methods of evaluation for objectives). Lowest correlations were found between questions 23 and 34 (developing a respect for all persons and their potentials), and questions 63 and 85 (maintain positive relationships with parents).

These and other assessments are a vital part of our program as they enable the faculty to evaluate the overall effectiveness of the Department's various functions. In sum, the findings indicated to our Department that we have been very effective in preparing our graduates but that we also needed to provide additional instruction in multicultural education, classroom applications of technology, and how to deal effectively with parents and community members.

Inventing the Future

The University of Richmond has set forth in its present strategic plan, goals which will shape the future of its programs, faculty development, and student body. These goals outline procedures for providing support for teaching and research, attracting a diverse student population of bright and motivated students, and advancing the use of technology in all areas of study and University functioning.

The Department of Education, through its own strategic planning and assessment efforts, is prepared to align its programs and activities with the University's ambitious goals. Opportunities for undergraduate student research will be doubled over the next two years to include summer opportunities. Our Department is encouraging collaborative research between faculty and students, particularly field studies within local public schools. Another goal of the University is to provide programs which encourage study abroad. We support this goal and have already established an internship in Germany and are presently exploring other international internship and study opportunities. in England and Spain.

The University is committed to taking full advantage of advances in technology and our Department has anticipated this initiative. The Office of Technology Assessment (1995) estimates that the number of computers in K-12 schools increased by 300,000 to 400,000 per year during the last decade. Currently, the total number of computers in schools averages one for every nine students. Among the skills possessed by today's teachers must be the ability to successfully integrate instructional technology into regular classroom instruction. However, current literature suggests that few teachers routinely use computer-based technologies for instructional purposes (Hunt & Bohlin, 1995). In addition, computers are generally used for low-level tasks such as drills and word processing (Office of Technology Assessment, 1995). Goals of the Department include modeling appropriate uses of computers for instructional purposes, developing technology courses for pre-service teachers, and establishing a state-of-the art technology classroom for instruction.

The recently released report from the National Commission on Teaching and America's Future (1996) outlines several challenges for teacher preparation programs as we enter the next century:

1. teacher education and professional development should be organized around identifiable standards for students and teachers.
2. graduate level teacher preparation programs should involve course work connected to extended practicum in the schools.
3. mentoring programs should be established to provide support and evaluation for beginning teachers.
4. stable and high quality sources of professional development should be made available to all teachers.
5.

The Department of Education has been extremely proactive in anticipating these and other calls for change within teacher preparation. All courses within our programs are rigorously examined for course content with matrices in each course updated regularly. Course objectives are carefully aligned with Virginia's Standards of Learning and the recommendations of professional societies. Graduate courses must contain relevant field experiences and at the present time, our special education and reading supervision programs are serving as models for our other graduate programs.

The Education Department is a leader in current thinking on the mentoring of new teachers. This Fall, the Department entered into a relationship with a local school division for the purpose of mentoring first year teachers. Members of the Department provided staff development and will continue to provide assistance as consultants. The Department also offers assistance to teachers as they renew their licensure and acquire new skills.

The Department is committed to introducing programs and courses that are consistent with current needs of the field as well as contributing to the arts and sciences. The goal of the Department is to be an integrated part of the School of Arts and Sciences and to take the lead in terms of being a resource to the campus and the educational community. The Department has and will continue to anticipate changes in the University's mission and strategic planning as well innovations within the field of education. More new teachers will be hired in the next decade than in any previous time in our history. With this in mind, it is important that we continue in this vein and consistently assess our needs in order to meet the demands of preparing teachers for the 21st century.

APPENDIX A–STATEMENT OF PURPOSE

The University of Richmond is an independent, privately-endowed institution of higher education that provides a comprehensive academic program for men and women It offers the intimacy of a small university and the diverse educational opportunities that derive from undergraduate degree programs in the liberal arts and sciences and in business, as well as graduate and professional programs in law, business, and selected areas of the arts and sciences The University also provides a variety of credit and continuing education programs to the larger community Related to the Baptist General Association of Virginia, the University affirms its commitment to serve individuals of all faiths and persuasions, without regard to race, age, physical handicap, or national origin The educational objectives of the University are:

- to cultivate in students the interest, capacity, and skills necessary for independent intellectual inquiry and life-long learning;
- to convey to students a representative portion of that body of knowledge that has accumulated and endured through the history of cultures;
- to encourage and aid students in the development of basic beliefs, values, and attitudes;
- to assist students in selecting and preparing for careers and for study in graduate and professional schools;
- Contribute to health and physical fitness In order to achieve these objectives, the University is committed to:
- an educational environment conducive to the development of the whole person-intellectually, socially, spiritually, physically, and morally;
- an academic setting that guarantees and encourages freedom of thought, expression, and association;
- an undergraduate curriculum that requires mastery of essential intellectual tools, understanding of basic aspects of human culture, extensive knowledge of at least one area of study and physical exercise;
- a faculty dedicated primarily to excellent teaching and dialogue with students, while remaining actively engaged in scholarly, scientific, and artistic creativity;
- a diverse, largely full-time and residential student body that participates in a broad range of University activities;

- the essential resources for learning, such as libraries, laboratories, studios, computers, and audio-visual facilities and materials;
- opportunities for social commitment and public service, internships, travel and study abroad, and other appropriate learning experiences outside the campus;
- a program of varied social, spiritual, and physical activities that provide occasions for growth, fun, and fellowship;
- an administration that preserves and enhances the University's environment and resources, and that represents the institution to the broader community it serves.

This Statement of Purpose was adopted by the University of Richmond Board of Trustees in May of 1987.

APPENDIX B--FOLLOW-UP GRADUATE SURVEY

I. (DEMOGRAPHIC INFORMATION)

II. PROFESSIONAL DEVELOPMENT

GRADUATES RESPONDED TO QUESTIONS 14-86 USING THIS SCALE: A. STRONGLY AGREE B. AGREE C. DISAGREE D. STRONGLY DISAGREE

The following components of the University of Richmond's teacher preparation program contributed positively to my professional development:

14. Academic Advising.
15. General College Coursework (liberal arts).
16. Courses in Major.
17. Professional Education Courses.
18. Student teaching.
19. Early Involvement/Field Experiences.
20. Career Planning/Placement Services.

III. PERSONAL GROWTH AND WELL BEING

The attitudes/philosophies expressed in these goal statements are essential to my professional growth and well-being in terms of:

21. Being intellectually open and honest.
22. Viewing learning as a lifelong process.
23. Developing a respect for all persons and their potentials.
24. Encouraging exploration of personal motivation and behavior as a way of developing greater self-awareness.
25. Approaching my entrance into my career with energy and optimism
26. Developing an understanding of the historical, philosophical, and ethical foundations of my profession.
27. Developing and applying critical thinking and specific skills and knowledge required to be an effective professional.
28. Developing an ability and a desire to address the social, political, and value issues related to my work.
29. Being knowledgeable about technical applications that can assist in meeting my professional objectives and the needs of my students.

30. Advocating for the rights and welfare of others as part of your professional responsibility.
31. Developing a respect for the importance of collegiality in the workplace.

I believe my experiences and coursework at the University of Richmond prepared me to:

32. Be intellectually open and honest.
33. View reaming as a lifelong process.
34. Develop a respect for all persons and their potentials.
35. Encourage exploration of personal motivation and behavior as a way of developing greater self-awareness.
36. Approach my entrance into my career with energy and optimism.
37. Develop an understanding of the historical, philosophical, and ethical foundations of my profession.
38. Develop and apply critical thinking and specific skills and knowledge required to be an effective professional.
39. Develop an ability and a desire to address the social, political, and value issues related to my work.
40. Be knowledgeable about technical applications that can assist in meeting my professional objectives and the needs of my students.
41. Advocate for the rights and welfare of others as part of my professional responsibility.
42. Develop a respect for the importance of collegiality in the workplace.

ONLY CLASSROOM TEACHERS SHOULD RESPOND TO SECTIONS IV AND V.

IV. SKILLS AND KNOWLEDGE

The following skills and knowledge deemed necessary for effective teaching have been incorporated into our program. Please respond to the items below accordingly.

43. Developing instructional objectives.
44. Developing sequential lessons.
45. Developing methods of evaluation for objectives.
46. Self-evaluating instructional effectiveness.
47. Assessing individual students' developmental level and academic needs.
48. Maintaining accurate and organized student progress records.
49. Using a variety of assessment strategies to evaluate student performance/progress
50. Building rapport with students.
51. Working effectively with diverse student community to encourage growth and positive self-concept among all membe.
52. Provides a learning environment that is attractive and orderly.
53. Knowing basic subject area content (facts, concepts, skills) in all areas of instructional responsibility.
54. Using a wide variety of instructional methods and materials to meet diverse student learning needs and interests.
55. Individualizing instruction.
56. Using appropriate instructional technology in all subjects.
57. Promoting student achievement.

58. Organizing classroom resources (time, space, materials and equipment, etc.) to support learning and behavioral goals.
59. Managing group activities.
60. Reinforcing appropriate student behavior.
61. Anticipating and dealing successfully with inappropriate behaviors.
62. Working cooperatively with professional colleagues.
63. Maintaining positive relationships with parents.
64. Using technology as a professional support tool (word processing, record keeping, computer networks, etc.).

V. PREPARATION

My education at the University of Richmond prepared me to:

65. Develop instructional objectives.
66. Develop sequential lessons.
67. Develop methods of evaluation for objectives.
68. Self-evaluate instructional effectiveness.
69. Assess individual student's developmental level and academic needs.
70. Maintain accurate and organized student progress records.
71. Use a variety of assessment strategies to evaluate student performance/progress.
72. Build rapport with students.
73. Work effectively with diverse student community to encourage growth and positive self concept among all members.
74. Provide a learning environment that is attractive and orderly.
75. Know basic subject area content pacts, concepts, skills) in all areas of instructional responsibility.
76. Use a wide variety of instructional methods and materials to meet diverse student learning needs and interests.
77. Individualize instruction.
78. Use appropriate instructional technology in all subjects.
79. Promote student achievement.
80. Organize classroom resources (time, space, materials and equipment, etc.) to support learning and behavioral goals.
81. Manage group activities.
82. Reinforce appropriate student behavior.
83. Anticipate and deal successfully with inappropriate behaviors.
84. Work cooperatively with professional colleagues.
85. Maintain positive relationships with parents.
86. Use technology as a professional support tool (word processing, record keeping, computer networks, etc.).

Open-Ended Responses

Please respond to the following questions on this sheet. If a question does not apply, leave it blank. Feel free to write on the back and/or attach additional pages if more space is needed. Please enclose this sheet and any additional pages with the computer sheet in the self-addressed, stamped envelope. Thank you!

I. Background Information

1. Name (OPTIONAL)
2. Home Address/City/State/Zip (OPTIONAL)
3. Certification Area:
4. Endorsements Held:

Briefly describe your future career plans.

II. Evaluation of the University of Richmond's Teacher Preparation Program

1. What aspects of the University of Richmond's teacher preparation program were most helpful to you personally and professionally?
2. List specific suggestions for the improvement of the University of Richmond's teacher preparation program.

SUMMARY STATEMENT OF TEACHER FOLLOW-UP QUESTIONNAIRE

Scale: 5 - Excellent; 4 - Good; 3 - Satisfactory; 2 - Fair; 1 - Poor; NA - Not Applicable

1. Instructional methods
2. Faculty competence
3. Student teaching
4. Other field experience
5. Class size
6. Advising
7. Tests and grades
8. Content of education courses
9. Content of general education courses
10. Career Planning & Placement

How has teacher education helped you:

1. Meet instruction responsibilities
2. Manage classroom behaviors
3. Work with other teachers
4. Understand different backgrounds and cultures
5. Teach in an inclusive classroom
6. Evaluate school achievement
7. Use school and community resources
8. Interact effectively with students
9. Meet individual needs
10. Maintain personal perspective and set goals

Appendix C–Data Summary One

Question Summaries	Mean	Question Summaries	Mean
21	1.3514	53	1.6471
22	1.0541	54	1.6061
23	1.1429	55	1.8788
24	1.4054	56	2.0303
25	1.1351	57	1.5758
26	1.9189	58	1.6667
27	1.3889	59	1.5588
28	1.5676	60	1.4706
29	1.5000	61	1.6970
30	1.7143	62	1.6250
31	1.4167	63	1.6774
32	1.7222	64	2.1176
33	1.4571	65	1.4545
34	1.6944	66	1.7059
35	1.9706	67	1.8333
36	1.5946	68	2.0645
37	2.0270	69	2.2581
38	1.7838	70	2.3125
39	2.0811	71	1.9394
40	2.2727	72	1.8788
41	2.1176	73	2.2353
42	1.9167	74	1.6765
43	1.4706	75	1.8824
44	1.5625	76	1.9706
45	1.6563	77	2.2941
46	1.6563	78	2.3235
47	1.9688	79	1.7941
48	1.9688	80	1.8235
49	1.7879	81	1.9706
50	1.5000	82	1.9118
51	1.9063	83	2.2424
52	1.5000	84	2.1563
		85	2.2903
		86	2.5152

Appendix D–Data Summary Two

STATEMENT	CORRELATION COEFFICIENT
Being intellectually open and honest	.4518
Developing a respect for all persons and their potentials	. 0942
Developing and applying critical thinking and specific skills and knowledge required to be an effective professional	. 2064
Development for the importance of collegiality in the workplace	. 1835
Developing instructional objectives	.6864
Developing methods of evaluation for objectives	.6806
Assessing individual student's developmental level and academic needs	..5501
Using a variety of assessment strategies to evaluate student performance and progress	.4382
Working effectively with diverse student community to encourage growth and positive self-concept in all members	..3326
Knowing basic subject area content (facts, concepts, skills) in all areas of instructional responsibility	.4119
Individualizing instruction	.2615
Promoting student achievement	.6163
Managing group activities	..3177
Anticipating and dealing successfully with inappropriate behaviors	..5122
Maintaining positive relationships with parents	.0759

References

Beatty, B. (1990). Teaching teachers in private universities. In Goodlad, J., Soder, R. and Sirotnik, K. (Eds.), Places Where Teachers are Taught (pp. 187-235). San Francisco, CA: Jossey-Bass Publishers.

Burgess, C. (1990). Abiding by the rule of birds: Teaching teachers in small liberal arts colleges. In Goodlad, J., Soder, R. and Sirotnik, K. (Eds.), Places Where Teachers are Taught (pp.87-135). San Francisco, CA: Jossey-Bass Publishers.

Darling-Hammond, L. & Cobb, Velma L. (1996). The changing context of teacher education. In Murray, F. B. (Ed.), The Teacher Educator's Handbook: Building a Knowledge Base for the Preparation of Teachers (pp. 14-62). San Francisco, CA: Jossey-Bass Publishers.

Goodlad, J. (1990). Connecting the present to the past. In Goodlad, J., Soder, R. and Sirotnik, K. (Eds.), Places Where Teachers are Taught (pp. 3-39). San Francisco, CA: Jossey-Bass Publishers.

Hunt, N.P. & Bohlin, R.M. (1995). Events and practices that promote positive attitudes and emotions in computing courses. Journal of Computing in Teacher Education, 11 (3), 21-23.

Murray, F.B. & Porter, A. (1996). Pathway from the liberal arts curriculum to lessons in the schools. In Murray, F. B. (Ed.), The Teacher Educator's Handbook: Building a Knowledge Base for the Preparation of Teachers (pp. 155-178). San Francisco, CA: Jossey-Bass Publishers.

National Commission on Teaching and America's Future (1996). What Matters Most: Teaching for America's Future. New York: National Commission on Teaching and America's Future.

Office of Technology Assessment, United States Congress (1995). Teachers and technology: Making the connections. OTA report summary. Washington, D.C.: U.S. Government Printing Office.

Soder, R. & Sirotnik, K. (1990). Beyond reinventing the past: The politics of teacher education. In Goodlad, J., Soder, R. and Sirotnik, K. (Eds.), Places Where Teachers are Taught (pp. 385-411). San Francisco, CA: Jossey-Bass Publishers.

University of Richmond (1995). Engagement in Learning: A Profile of Aspiration for the University of Richmond. Richmond, VA: University of Richmond, Office of the President.

TOPIC FOUR

Capitalizing on International Collaboration for School Reform

CONSORTIUM: EFFECTIVE INSTRUMENT FOR FOSTERING PARTNERSHIP IN SCHOOL REFORM

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INTRODUCTION

Universally, a symbiotic relationship exists between institutions of learning within a country and among countries. This partnership has been demonstrated by the exchange of information and beneficial sharing and enhancement of resources have demonstrated this partnership whenever and wherever needed. To make a linkage binding, a consortium is usually established by way of a Memorandum of Agreement.

The advantages of consortium may be gleaned from several standpoints: it is relatively economic means of brining about change; it provides an opportunity for the institutions to examine critically other practices and to evaluate their appropriateness for adoption; it helps strengthen the academic programs; it broadens contacts and the knowledge base on which curricular discussions might be made; and it enhances global communication between institutions having similar goals.

Palawan State University's Experience

Consortium is one of the strategies adopted by the Palawan State University to strengthen its instruction, research and extension programs. PSU has established consortia with local and international agencies to effect reforms. Transfer of new technology and innovative approaches.

Consortia for Reforms in Instruction. Linkages have been established by the university for the enrichment of its academic programs to make it more responsive to local, regional and national development needs. These are:

1. Consortium with Robert Gordon University.

A consortium has been established between the Palawan State University and the Robert Gordon University in Aberdeen, Scotland for the opening of Bachelor of Science in Petroleum Engineering and Petroleum Engineering Technology on June 5,1995. These two courses are the first of its kind in the Philippines and in Asia. Bachelor of Science in Petroleum Engineering is a five-year degree program designed to give the graduates a balanced education in the areas of drilling, production, sub-sea maintenance, instrumentation, safety and project management. The Petroleum Engineering Technology on the other hand, is a three-year non-degree program designed to provide the students a through grasp of the basic course of Petroleum Engineering and to equip the graduates with balanced technical training on drilling, production, safety and instrumentation.

As part of the Memorandum of Agreement between the Robert Gordon University and the Palawan State University, faculty exchange and scholarship grants have been initiated. Two faculty members in the College of Engineering have availed of a one-year scholarship for a Master's degree in Off-shore

Engineering last year through the British Chevening Scholarship Award. Another faculty member is pursuing a masteral course in Engineering at Robert Gordon University now. With the RGU tie-up, lecturers from the Robert Gordon University visit Palawan State University to deliver series of lectures on Petroleum courses.

2. *Partnership with TESDA*

The Technical Education on Skills Development Authority, charged with the responsibility of formulating policies and plans for training and skill development and setting of national trade skills standards, has been assisting the university particularly the College of Engineering and Technology in its Civil, Mechanical and Electrical Technology course offerings.

The PSU-TESDA partnership has enhanced the institution's goal of producing well-rounded graduates who are globally competitive and ready to join the regional, national and even international workforce.

A close link with TESDA has enhanced also to capabilities of faculty members handling technology courses with respect to particular trades for prospective automotive mechanics, electricians, welders, furniture and cabinet makers, etc, through the regular Trainers' Training Program it conducts.

3. *PSU as a Learning Center in the UP Open University DOST-SEI-PSU Distance Education Program*

Palawan State University is one of the pioneers and established learning centers of the Distance Education Program of UP. Its pilot program started in June 1992. Diploma in Science Teaching major in Chemistry and Physics was the first course offerings. The participants were high school teachers of Palawan who were not majors of physics and chemistry but were teaching the subject. There were 30 teacher-participants from DECS who enrolled in the program. Two study centers were established, one at Palawan National School-Main and the other at Roxas National Comprehensive High School in Roxas, Palawan. In each study center, there were 15 teacher-participants, 7 majoring in chemistry and 8 majoring in physics or vice versa. Out of this 30 invited participants, a total of 14 participants were able to graduate after 2 years. Their graduation ceremony was held last April 22, 1995. They were the first batch who graduated after the establishment of the UP Open University (UPOU).

The Diploma in Science Teaching Coordinator for Palawan is from PSU. Study area tutors were selected from Palawan States University, Palawan National School and School for Philippine Craftsmen. A regular coordinator and study area tutors training program are scheduled and conducted by CAS-UPLB at the PSU Campus, a week before any course is offered so that coordinators and study area tutors may fulfill their function according to the standard set by UP.

The education of secondary and tertiary teachers of science and mathematics in the country is the main concern of the University of the Philippines Open University (U.P.O.U.). The linkage between the Palawan State University and the University of the Philippines has benefited mostly teachers in Secondary Schools over the province of Palawan whose line of expertise is not science nor mathematics but are handling these subjects due to the dearth of Science and Mathematics teachers. Instructors and professors of the College of Sciences in

Palawan State University consider this consortium an effective vehicle for their educational development. With the University of the Philippines Open University (U.P.O.P.), funded by the Department of Science and Technology (D.O.S.T.) the Science and Mathematics instructors and professors of the Palawan State University enjoy the privilege of pursing masteral and doctoral courses at the University of the Philippines as scholars. Three of the faculties of the College of Sciences of the PSU are presently taking up Doctorate Courses at the University of the Philippines. The selection of PSU as a U.P.O.U. learning center paved the way for the recognition of Teacher Education Institute in the University. This Institute is instrumental in the training and retraining of teachers on the contents and pedagogy of Mathematics and Sciences.

It was also the linkage with the University of the Philippines Graduate School that brought the dream of allowing the professors of U.P. Diliman to handle doctoral subjects at the PSU Graduate School.

4. *PNU-PSU Linkage*

The desire of the Palawan State University for the sustenance and continuity of excellence in teacher education opened the door for a consortium with the Philippine Normal University, the premier teacher training institution in the country today. An initial activity was undertaken by holding a joint conference in April 1996 entitled "PSU-PNU Joint Seminar-Workshop: Strengthening the Teacher Education Programs." The concept of a big -sister assisting a little one has started. The blossoming of this partnership will materialize soon. Meantime, Study and Observation tours of the PSU Laboratory Elementary School at the PNU Laboratory School for a week is in the offing. So with faculty exchange in the different academic fields.

5. *PSU's Tie-Up with the Commission on the Filipino Language*

Palawan State University has been chosen as the Regional Center for the National Language (Region IV-Southern Tagalo) by the Commission on Filipino Language (CFL). An agreement was signed on August 14,1995 between the President of PSU (Dr. Crispiniano R. Acosta, Sr.) and the Chairman of the CFL (Dr. Ponciano B. Pineda).

As the Regional Center for the Filipino Languages, the office is committed to:

1. Help the information campaign on the importance and necessity of Filipino as an effective instrument for national unity and progress.
2. Take steps to enhance the use of Filipino in official communications, transactions and correspondence in offices.
3. Sponsor training programs for personnel development (schools and offices) on the proficiency in the use of Filipino in different levels and occasions.
4. Undertake researches on local languages, literature and other studies to promote the evolution, development, enrichment and eventual standardization of Filipino and other Philippine languages.

As its maiden project, a Seminar-Workshop in Filipino for school and office personnel was held recently. Official correspondence was among the topics. More conferences based on need will be held. On the research front-Surveys on the knowledge and proficiency in Filipino, Compilation of Local Literature and Study of Local Languages are the scheduled undertakings.

6. *PSU-PET Consortium*

PSU has a joint undertaking with the Philippine Educational Telecommunications Consortium (PETCO) for the development and establishment of an educational television (EDTV) network for the airing of programs for distance education, telecourses and general information purposes. It will be operational very soon. As one of the first few locations for Television Receiving Only (TVRO) stations of the PETCO EdTV network, PSU is proud to be a part of the laudable project/undertaking. The nationwide network is envisioned to be a national telecommunications network linking regional/provincial and eventually, barangay level earth receiving stations through voice data and/or transmissions mode. This EdTV network will be one of the best things to happen to distance education, especially to the people in the remote barangays of Palawan.

7. *Coordination with the Provincial Government, Division of Schools for Palawan, NEDA and UNICEF for Multi-Grade Class*

On June 3,1996, the University opened a Multi-Grade class in the PSU-LES with financial assistance from the United Nations Children's Fund (UNICEF). The idea was conceived because of a felt need and the encouragement given by the Provincial Governor who head the Provincial Country Program for Children and Education for All. The proposal to enrich the BEEd curriculum with the inclusion of Multi-Grade Instruction as a subject in college and the Opening of a Multi-Grade Class in the LES to serve as laboratory for fourth year Bachelor of Elementary Education students got the nod of the PSU Academic Council and Board of Regents. Later, the same proposal was submitted to the Regional CPC IV Steering Committee at NEDA-IV, Manila. This was readily accepted and given funding by the UNICEF for materials and supplies and the training and re-training of teachers who will handle Multi-Grade classes in the city of Puerto Princesa and the province of Palawan.

To sum up, consortia for reforms in instruction are established for the purpose of upgrading and updating teachers' competencies both in content and strategies in different areas of specialization, providing the faculty and staff the opportunity to pursue graduate education without inbreeding and to enrich the teachers' learning experiences.

Consortia for Reforms in Research. Palawan Palawan State University is cognizant of the need to improve its research projects. It was the satisfaction of such need that consortia with the National Museum and the International Labour Organization were established.

Consortium with Philippine National Museum was established for the research activity that could generate data on the feasibility of reintroducing the ancient script to the Tagbanua and Pala'wan.

The study entitled "Propagation and Preservation of Tinagbanua Syllabic Script" specifically intends to find out how many **Tagbanua and Palawan**** are still capable of writing the syllabic script. Its objectives also include the making of a profile of the Tagbanua or Palawan who are still capable of writing the Tinagbanua Script and the locating and identifying of the geographic position of each person or community still using the syllabic script. The study also aims at establishing a general rule on how the syllabic script is to be written based on the informants' writings ad at determining the variation between the Tagbanua and Pala'wan Methods of Script Writing.

The linkage established with the Pal; a wan State University by the International Labor Organization has relevance to the research project entitled "Indigenous knowledge systems and Practice of the Tagbanua and Formulation of a *Framework for their Conservation and Promotion" in connection with the celebration of the International Decade of the World's Indigenous People. The reason for this celebration is to ensure a continuous emphasis on the plight of indigenous people and to sustain both existing efforts and those to be initiated for the benefit of those people.

The research Project seeks to address these problem areas: (1.) The need for legal recognition and protection in the context of economic development and soci-political participation by indigenous and ethnic people; (2.) The need to preserve sustainable development practices for the benefit of the indigenous and ethnic people; and (3) The need to promote indigenous knowledge system and practices for wider adoption by other sectors.

The PSU Center for Palawan Studies, a research-oriented and non-academic unit of the university links with the barangay and municipal government where research site as the habitation of the ethnic groups focussed by the ethnographic studies. Support for the security of the members of the research staff and the facilitation of contact with key informants have been extended by the office of the Municipal Mayor and of the Barangay Chairman.

Due to the inadequate audio-visual facilities, the Center for Palawan Studies received assistance from the provincial government in the form of facilities like vehicles and portable generator. These facilities were, needed during the performance of ethnic rituals in the evening which the research group documented and recorded.

How relevant to educational reforms are the research outputs? The Tinagbanua syllabic script can be introduced in the study of alphabet or reading. Lectures in Anthropology and History may be enriched by the integration of indigenous knowledge systems and practices of the ethnic groups. The research findings generated through the ethnographic studies conducted by the research staff of the Centers for Palawan Studies can be useful inputs for the production of instructional material in Social Studies. The books will present units on features of the Ethnic Community; their Socio-cultural; and Economic Life; their Political

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** These are ethnic people who descended from Indonesians B who dwell in the town of Espafiola and Quezon, Palawan, Philippines.

* These are ethnic people believe to be descendant of Indonesians A who inhabit the municipalities of Aborlan and Coron, Palawan, Philippines

System; Their Ethnic Dances and Music; Their Subsistence and Diet; Their Oral Literature; and their Medicinal Plants and Healing Practices.

Consortia for Reforms in Extension. The Extension Office of the Palawan State University is its arm in reaching out to the communities. It specifically provides service and varied forms of livelihood activities to develop the occupational skills of unemployed and underemployed residents of the depressed, disadvantaged and undeserved communities.

Foci of the training offered by the extension office include functional literacy, continuing education, health care service, and lectures on marketing and entrepreneurship. Training is non-formal through lectures and demonstration. The ultimate goal is the cultivation of the clientele's self-reliance and self-sufficiency.

The Palawan State University has established linkage with agencies, which could ably support the need for human and financial resources in actualizing the extension programs and projects. This includes the city government of Puerto Princesa, the provincial government of Palawan, APSOM. JHPIEGO, the barangays, and the local radio station.

1. PSU on the Air.

In 1991, the university ventured in an extension project designed to achieve equity and broaden access to education through distance learning via a radio broadcast called "PSU on the Air". Its main objective was to run a program that will feature new ideas; new information and new technology that may well be within the easy reach of the underprivileged sector of the province and the city.

The institution's Distance Learning System called "PSU on the Air" is mainly informational. It was launched in October 1991 and aired through the facilities of the Palawan Broadcasting Coradcasting Corporation's DYPR. This one-hour weekly program tried to get in touch with women, children, parents, out-of-school youth, unemployed and underemployed and other disadvantaged groups. Through a well-planned and organized activity, the 9-10 Saturday morning radio program touched on a variety of topics ranging from health, education, environment, celebrations during the week, etc. Its format is: news about PSU, intermission numbers, interview with a resource person on the topic for the day, livelihood projects, Practical Household Tips and feedback from listeners through an "Alamin" portion.

A committee takes care of the "PSU on the Air". There is a Project Consultant and Planning Committee composed of a Program Director, Scriptwriter, Host, Anchor and Coordinator. Weeks before the program is aired, a meeting is held. Topics for inclusion are discussed. If a resource speaker is needed, the coordinator invites one, after getting the approval of the consultant. Once everything is set, the scriptwriter does her job. The host uses the script as guide during the program. To assess how the program fares, there is pre- and post-evaluation of weekly broadcasts.

2. The APSOM-JHP-IEGO-PSU Reproductive Health Care Center

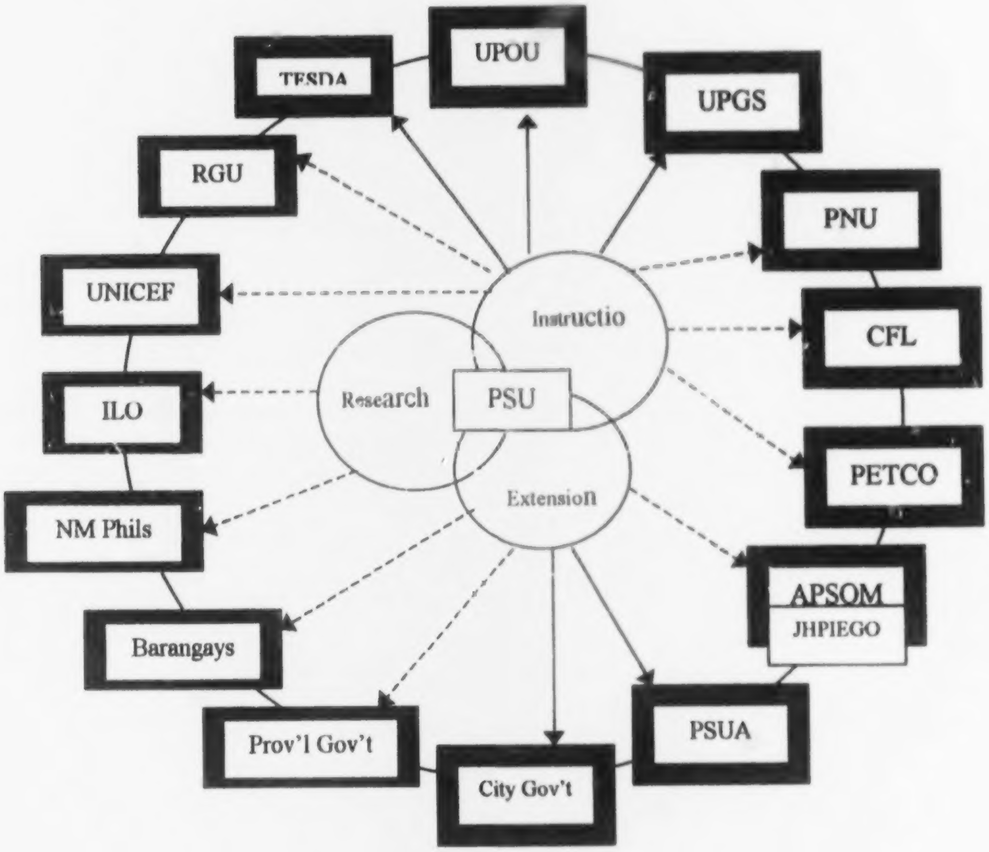
On January 22,1995, the University signed an agreement with the Association of the Philippine Schools of Midwifery (APSOM) and John Hopkins Program for International Education in Gynecology and Obstetrics (JHPIEGO) for the establishment of a Regional Reproductive Health Care Center in the PSU Manalo Campus, Puerto Princesa City. Services were made available to the community since then. These are; Responsible Parenthood, Pre-Natal and Post-Natal Care, Birthing, Lying-In/Rooming In and primary Health Care. The Center has helped a number of women in the city.

Another service extended by the Center is the Training of Trainers on Clinical Skills. It has sponsored one on May 31,1996 with participants coming from the different parts of the country.

How valuable are the extension projects and activities in effecting educational reforms? The functional literacy projects does not only raise the literacy rate of people inhabiting the depressed, disadvantaged and undeserved communities but it is able to inculcate desirable values to the clientele. The continuing Education Project is able to upgrade the competencies of the teachers. More importantly, the extension project on livelihood skills development is able to instill in the minds of the clientele the value of education be it formal or informal for the development of self-reliance and self-sufficiency.

The trilogy of the Palawan State University's functions such as research, instruction and extension are supplementary and complementary with each other. Research is used to generate knowledge while instruction is used for the formal dissemination of the knowledge and extension is for the utilization of such knowledge for the production of more tangibie output. The interrelations of the three-fold functions of the Palawan State University and their relationship to the supporting agencies are reflected in the paradigm.

Fig. 1.A. **Paradigm showing the interrelations of the Research, Instruction and Extension thrusts of the Palawan State University.**


TESDA
UPOU
UPGS
RGU
PNU
UNICEF
Instructio
CFL
ILO
Research
PSU
PETCO
Extension
NM Phils
APSOM
JHPIEGO
Barangays
PSUA
Prov'l Gov't
City Gov't

Legend:

UNICEF	United Nations Children Educational Fund.
RGU	Robert Gordon University.
TESDA	Technical Education and Skills Development Authority.
UPOU	University of the Philippines Open University.
UPGS	University of the Philippines Graduate School.
PNU	Philippines Normal University.
CFL	Center for the Filipino Language.
PETCO	Philippine Educational Telecommunications Consortium
APSOM	Association of the Philippine Schools of Midwifery.
JHPIEGO	John Hopkins Program for International Education in Gynecology and Obstetrics.
PSUA	Palawan State University on the Air.
City Gov't	City Government of Puerto Princesa .
Prov'l Gov't	Provincial Government of Palawan
NM Phils	National Museum of the Philippines.
ILO	International Labor Organization.

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As shown in the paradigm, research, instructions and extension as the main thrust of the Palawan State University are closely attached to each other. It should be construed that one of these does not function efficiently and effectively without the other two. The interrelation of the three functions can be seen in the ways the teachers perform them. Teachers are performers of the institution's research, in-struction and extension functions. This is exemplified in the following case.

> *There was a beginning teacher whose initiation was a teaching assignment at a depressed, disadvantaged and undeserved community. Since Filipino teachers are entrusted with the task of contributing to the improvement of the community, teacher, was faced with such challenges.*
>
> *She spent sleepless nights thinking of how she could perform the three functions of the school in a way that would yield fitful results. Because she was values-oriented, she applied the values of diligence, perseverance and wisdom. She first thought of how she could generate knowledge through research. The school she was assigned to teach suffered from scanty supply of learning materials. Without information she had nothing to transmit. Without knowledge received from her, what could her student utilize?*
>
> *Teacher x, eventually arrived at the solution to the problem. She observed closely the school environment and the community. It abounds with natural endowment but the people are impoverished by unemployment. She interviewed people who possessed the expertise in wisely utilizing the rich environment as source of subsistence. She patiently noted sown the responses until she came up with a thick notebook of information for the proper development of the environment. She used this to help people live contentedly and happily. She lessons transmitted to the students. The student finally learned how to make their environment useful and productive through observing the demonstration made by the people Teacher x invited to assisted her in disseminating the information. The livelihood skills developed in the children by the school through the able support from invited trainers later generated income for the family. Thus learning provided in the school was utilized for a better and more productive endeavor.*

The foregoing case occurred to the individual teacher whose initiative was employed to effect change in the livelihood of her analogous to the case of Teacher X. The university is barely two years old yet much is expected of it by the community. Like Teacher X, Palawan State University tap its Research Office in generating information with regards to the manpower each existing agency in the community needs in the next few decades. The Research office also examined the evaluation forms accomplished by the students when they rated their respective teachers and by the deans and department chairmen when they observed the teachers' classroom performance. These evaluative materials revealed the kind of performance the faculty of the Palwan State University have. Similarly, the evaluative materials show the deficiencies of the faculty. These deficiencies served as baseline data for the Research Office to design a strategy on how the deficiencies of the teachers could be reinforced. The training or retraining programs are deemed to greatly share for the improvement of teachers' teaching competencies. This is where linkages with agencies that serve the purpose of improving the teaching skills and knowledge of teachers are established. This is proven by the linkage between the University of the Philippines and the Palawan State University. Three of the University's doctoral students finished the degree due to the possibility of networking with lectures from the University of the Philippines Graduate School. The improvement of teaching experiences of Mathematics and Science teachers is realized through the linkage with the Open University of the Philippines. The completion of the courses in Master's in Petroleum Engineering by two of the faculty of the College of Engineering and Technology of the Palawan State University evidenced the successful establishment of an international linkage.

Tie-up with the aforesaid agencies or institution did not only contribute to the improvement of the faculty's teaching skills and behavior but also to the enrichment of the instructional facilities and equipment. The University of the Philippines Open University has donated science apparatus and equipment. With these materials, learning experiences among the students is facilitated and enriched. Students are now exposed to the manipulation of modern instructional technologies. Their education can be compared with what other prestigious schools offer.

The consortium with the Robert Gordon University exposed the students to first hand experiences of receiving knowledge from foreign lecturer. This opportunity will serve as an effective preparation for their future job particularly with overseas agencies. Having linkage with the Robert Gordon University enabled the Palawan State University to increase the number of engineering facilities and equipment. The adequacy of such instructional resources has been very useful in keeping the students abreast with instructions comparable to well-known tertiary schools in the Philippines.

The linkage between the Palawan State University and the International Labor Organization and the National Museum of the Philippines was very instrumental in equipping the personnel of the research office with knowledge and skills in conducting participatory research and ethnographic studies. Such experience had multiplier effects. The researchers involved have shared their knowledge with other members of the Palawan State University who have enthusiasm in research work.

The linkage with the City Government of Puerto Princesa City and the Province of Palawan which was in the form of financial aid for the training of extension workers resulted in the upgrading of the extension workers' training experiences. The expertise they acquired and developed is now shared with underemployed and unemployed residents of the barangays used as training avenues. The shared knowledge and skills from the extension workers led to the upliftment of their socio-economic life.

The impact of the consortium could be summarized as follows:

1. Upgrading of teachers' and students' competencies.
2. Improvement of instructional facilities
3. Upgrading teachers' knowledge on teaching content and strategies.
4. Enriching student and teachers' experiences
5. Alleviating the cost of teachers higher education
6. Raising the standard of instruction, research and extension
7. Establishing mutual understanding among schools towards educational development.

BURNOUT AND COPING AMONG PALESTINIAN TEACHERS

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Teaching has been identified as a particularly stressful occupation (Cacha, 1981, Farber and Miller, 1981; Paine, 1981). Negative aspects of the job such as disciplinary problems, student apathy, overcrowded classrooms; inadequate salaries, political situation and lack of administrative support are among the stressors that confront teachers. As a result of these stressful aspects of teaching, burnout among teachers occurs, expressed in physical (e.g., peptic ulcers, headaches), psychological (e.g., anxiety, depression), and behavioral (e.g., absenteeism, deterioration in quality of work, unproductive work behavior), interpersonal relations (Family, material) symptoms (Cunningham, 1982; Kahill, 1988). Teacher burnout is thought to be one reason for the increasing numbers of competent teachers who are leaving the classroom for alternative careers (Cunningham, 1982; Farber and Miller, 1981). The research results have shown that teaching is a stressful occupation. The International Labour Organization (1981) found out that occupational stress is one of the important factors that cause a drift away from the teaching profession.

Since the mid-1970s burnout has been a widely studied phenomenon in the human services field. Teacher burnout has became a topic of investigation as reflected in the numerous studies conducted in different countries, including the US (e.g., Mo., 1991; Chan and Hui, 1995) and Germany (e.g., Schaufuli, Daamen and Miero, 1994). This phenomenon has become an important aspect because of the high cost it has for the institutions, agencies, the students and the teachers. This international concern stems from a general view that teacher burnout may have a negative impact on the teachers themselves leading, for example, to emotional and physical ill-health, and on the students as burnout teachers may be relatively impaired in the quality of teaching and commitment, may give less information and less praise, show less acceptance of students' ideas and interact less with students (Kyriacou, 1987; Mancini, et al., 1984).

Maslach and Jakson (1978, 1979, 1981, 1986) defined burnout as a tripartite syndrome of emotional exhaustion, increased depersonalization of clients, and a reduced sense of personal accomplishment that occurred frequently among "people works" whose work involved intense interaction with other people. Daley (1979) indicated the burnout constitutes a major drain on an agency's effectiveness in terms of the expense of staff turnover.

According to Maslach and Jakson (1981), emotional exhaustion is often central burnout: a loss of feeling, interest, and spirit and of trust. The individuals suffering from burnout feel that they no longer give themselves to their work as they intended to (Maslach and Jakson 1981). The second aspect of burnout, lack of personal accomplishment, is the tendency for human service individuals to evaluate themselves negatively, and this lead them to believe that they are failing in their duty to help other people. The third aspect of burnout is depersonalization which refers to the change in workers perceptions of the clients through the development of negative attitudes and feeling towards their clients.

Maslach (1978) found that one-third of all human services workers suffered from high levels of burnout, one-third had average levels and one-third had low levels. Recent research has shown that the rates of burnout differ and vary according to the field of work (Poulin and Walter 1993). Although there are many studies on burnout among schoolteachers, no study has been conducted on the burnout among Palestinian schoolteacher. In the last two decades teachers burnout has become a topic of investigation as reflected in many studies conducted in different countries, including United States, United Kingdom, Europe and Israel. This international concern stems from general view that teacher burnout may have negative effect on the teachers themselves and on the student as burnout teachers may be relatively impaired in the quality of teaching and commitment, may give less information, less praise and show less acceptance of student's ideas. Thus the present study aimed at examining the dimensions of teachers burnout and their relationship with self-esteem, coping stratifies. In addition, gender difference and UNRWA, Government and private school teachers differences would be explored in a Palestinian sample of schoolteachers. The study also aimed at providing data on the major findings, which bring about burnout on teachers from a sample population in Palestine. No report from Palestine appears to have been published on burnout. It is the expectation of this study, therefore, to be able to compare the conditions that burnout teachers in this part of the world with what obtains in developed and industrialized countries.

Coping With Burnout

Particular attention has been paid coping with stress and burnout (Dunham, 1983, Gmelch, 1983). Coping is the effort to "master, tolerate or reduce external and internal demands and conflicts among them" (Folkman and Lazarus, 1980). Coping appears to involve two main strategies. The first is direct action, which involves positive dealing with a source of stress (e.g. devoting more time to marking to more easily meet assessment deadlines, changing the curriculum so that pupils are more motivated). Direct action is the more desrable strategyif such action can be effective. The second strategy is to use palliative techniques, which essentially accept the source of stress but attempt to mitigate the emotional experience of stress which follows. Palliative techniques fall into two groups: mental techniques that alter the teacher's perception of circumstances (e.g. putting things in perspective, trying to see the humorous side) and physical techniques (e.g. relaxation exercises, smoking). While palliative techniques can be effective, if the source of stress remains present, then some stress will inevitably beexperienced. A number of studies have surveyed the actions teachers take in order to cope with stress (Dewe, 1985; Dunham, 1983; Kyriacou, 1980).

METHOD

Sample

A random sample of 250 full time classroom teachers from West Bank and East Jerusalem was selected. To enhance the representativeness of the sample 40% of the questionnaires were sent to elementary school teachers, 30% to teachers who were teaching at the preparatory level and 30% to teachers who were teaching at the secondary level. A total of 200 completed questionnaires were returned, representing an 80% percent return rate. There were 107 males and 93 females. Ages ranged between 22 and 60 years (Mean = 34.7; SD=9.5).

Instrumentation

Eight variables are included in this study - three-burnout subscale and five predicator variables. The predictor variables include self-esteem, age, social status, sex and income.

Maslach Burnout Inventory (MBI)

The Maslach burnout Inventory was used to measure burnout (Maslach & Jackson, 1981). This scale measures three components of burnout: emotional exhaustion, depersonalization ("loss of concern and feelings for clients") and lack of personal accomplishment ("negative self - concept and negative job attitudes") Pines & Maslach, 1978, p.233).

The frequency scale of the MBI established by Maslach and Jackson (1981) was used in this study. Responses range over a seven - point scale from zero for "Never" to six for "Major, very strong". The MBI has been factor analyzed by Maslach and Jackson to yield three discrete sub-scales of burnout, namely emotional exhaustion, depersonalization and personal accomplishment. Emotional exhaustion relates to work stress, and is represented by statements such as "I fell I'm working too hard on my job". Depersonalization burnout is characterized by feelings of cynicism and negativism. Representative items include "I've become more callous towards people since I took this Job", and "I worry that this job is hardening me emotionally". Personal accomplishment indicates a sense of self - esteem, and is measured through items such as "I have accomplished Many worthwhile things is this job".

The scale was back translated by the author, ensuring that the original meaning intended by each item was retained in the Arabic version. Two Palestinian University students majoring in English were enlisted to back-translate independently the Arabic version into English. Any discrepancies were thoroughly discussed and resolved in joint agreement.

The scale has 22 items, and each is rated on both an intensity and a frequency dimension. For example, one item on the emotional exhaustion subscale is "I feel emotionally drained from my work". The Maslach burnout Inventory was used in this study because it has been widely employed in research on burnout among human service professionals such as teachers and social workers (Schwab, 1981; Jayaratne and Schwab, Benbow's (1990 self-esteem scale consisting of the following six items: (1) "I take a positive attitude toward myself", (2) "I feel I am a person of worth, on an equal place with others", (3) "I am able to do things as well as most other people", (4) "On the whole, I am satisfied with myself", (5) "At times I think I am no good at all", (6) "I feel I do not have much to be proud of". The scale has acceptable reliability with an Alpha coefficient of .80 and .89 for the original sample and for this sample, respectively.

Coping

COPE inventory (Carver et al., 1989) was used to assess teachers' coping strategies. The COPE is composed of the following scales: (1) Active coping (taking action or putting forth effort to remove or circumvent the stressor), (2) Planning (thinking about how to confront the stressor, planning one's efforts), (3) Seeking instrumental social support (seeking information or assistance or advice about what to do), (4) Seeking emotional social support (getting sympathy or emotional support), (5) Suppression of

1126

competing activities (suppressing one's attention to other activities in order to concentrate more fully on the stressor), (6) Turning to religion (increased engagement in religious activites, (7) Positive reinterpretation (making the best of the situation by viewing it in a positive light), (8) Restraint coping passively by holding back one's coping efforts), (9) Acceptance (accepting the fact that the stressful event has occurred and is real), (10) Ventilation of emotions (increased awareness of stress and tendency to ventilate or discharge emotions), (11) Denial (attempt to reject reality of the stressful situation), (12) Mental disengagement (using alternative activities to distract oneself from the problem or withdrawing mental effort from the attempt to attain the goal with which stressor is interfering), (13) Behavioral disengagement (reducing efforts to deal with the stressor or giving up efforts to attain the goal with which the stressor is interfering), and (14) Alcohol / drug use (turning to alcohol or other drugs as way of disengaging from stressor). All teachers were asked to indicate the degree to which they actually used each of the coping strategies when are faced with stressors in their work and everyday life on a four – point scale ranging form "does not apply or not used at all" (0) to "used a great extent" (4). The range of Alpha reliabilities for these subscales was .70 to. 89.

Results

Table1 shows the mean ratings of frequency of the feelings of 200 teachers on each 22 items of the MBI. It can be seen that the feelings associated with being used up, working too hard, working effectively and closely with students occurred more often. When the mean ratings of MBI items were computed separately for male and female teachers, significant differences were found for some items as presented in Table /. In general, while female teachers tended to complain of burnout more than male teachers.

Table (1)
Mean ratings, sex differences for items on the Maslach Burnout Inventory

	Mean Rating	Sex Male N (107)	Female N (93)	t
Emotional Exhaustion	3.4	3.3	3.4	
1. Felt emotionally drained from teaching.				
2. Felt used up at the end of work day	4.0	3.7	4.4	
3. Felt fatigued in getting up.	2.8	2.7	2.9	
6. Felt strained in working with people all day.	2.9	2.7	3.1	*
8. Felt burned out from work	3.7	3.4	4.2	
13. Felt frustrated by job	3.1	2.9	3.4	
14. Felt working too hard on job.	4.8	4.7	5.0	
16. Felt stressed in directly working with people	3.1	3.1	3.3	
20. Felt at the end of rope	3.1	2.7	3.5	*
Depersonalisation	1.9	1.6	2.3	
5. Felt trating students as impersonal objects				
10. Become calous toward people	4.4	4.4	4.5	

	Mean Rating	Sex Male N (107)	 Female N (93)	t
11. Worried got hardened emotionally by job	2.7	2.6	2.9	**
15. Did not care what happened to students	2.5	2.4	2.6	
22. Felt blamed by students for problems	3.0	2.7	3.3	**
Personal Accomplishment	4.1	3.9	4.4	
4. Easily understood students feelings				
7. Dealt effectively with students problems	4.5	4.5	4.4	
9. Felt positive influnce on others life	4.8	4.8	4.9	
12. Felt energetic	4.1	4.0	4.2	
17. Easily created relaxed atmosplere with students	4.9	5.0	4.8	**
18. Felt exhilarted after working with students	5.0	4.8	5.1	
19. Accomplished worthwhile things in job	4.3	4.0	4.7	
21. Dealt calmly with emotional problems	3.7	3.5	4.0	**

* *p<.05* ** *p<.01*

Subscales of burnout

Table 2 shows the mean scores of the three MBI subscales of Emotional Exhaustion (EEX), Depersonalisation (DPN), and Personal Accomplishment (PAC) when the appropriate items were scored into the three subscales. Comparing these means scores with those of the teaching profession in United Sates normative sample (Maslach and Jackson, 1986), the EEX mean is higher than the normative sample, higher depersonalisation and lower personal accomplishment were observed in Palestinian teachers.

Table (2)
Mean scores, standard deviation and interrelation of three subscales of burnout (MBI) n=200

	Emotional Exhaustion	DP	PA
Mean score	25.9	9.0	31.2
SD	10.9	4.6	10.1
Depersonalisation (DP)	.76**		
Personal Accomplishment (PA)	-.49**	-.50**	

** *p<.01*

Table 2 also shows the inter-correlations of the three subscales . It can be seen that the subscales correlated substantially with each other when emotional exhaustion and depersonalisation were considered.

BEST COPY AVAILABLE

To examine the effect of gender on burnout one-way analysis of variance was performed on the set of the burnout subscales scores. The results indicated that there were no significant gender effect on emotional exhaustion (F (1,198) = 2.6, p. 11), no significant gender effect on depersonalisation (F (1,198) = .25,p.11) and no significant gender effect on personal accomplishment (F (1,198)=. 2,p.8). Female teachers reported higher levels of burnout than male teachers in general. To examine the effect of kind of school (government, private and UNRWA), the results indicated no significant effect of kind of school on emotional exhaustion (F (2,197) = .2,p.8), while there is a significant effect on depersonalisation (F (2,197)=3.5,p<. 03), the mean scores were 11.9 for government, 9.3 for private and 13.0 for UNRWA and no significant effect on personal accomplishment.

Burnout and Coping

To examine whether coping strategies were related to burnout, the responses of 200 teachers to the copying strategies in COPE were scored into all subscales.
Table 4 presents the percentage of use of coping strategy, the mean scores separately for male and female teachers and for the total sample. No gender difference was found in the copying strategies among male and female teachers. The first rank of coping strategies was planning for total sample and last rank was a denial.

Table (3)
Percentage of use: mean scores, sex differences on COPE subscales.

Coping Scale	No. Items	% of use	Mean Score	M	F
Active coping	4	65	5.7	5.3	6.1
Planning	4	80	4.2	3.6	4.7
Seeking instrumental social support	4	60	5.6	5.4	5.8
Seeking emotional social support	4	49	6.6	6.7	6.5
Suppression of competing activities	4	29	8.6	7.3	7.3
Turning to Religion	4	64	5.8	6.1	5.4
Positive reinterpretation	4	61	5.6	5.3	5.9
Restraint coping	4	51	6.4	6.2	6.6
Acceptance	4	67	5.1	5.0	5.3
Ventilation of emotions	4	32	7.8	8.9	7.6
Denial	4	15	9.0	10.0	10.0
Mental disengagement	4	22	9.1	9.7	8.4
Behavioral disengagement	4	16	10	12.0	10.0
Alcohol/ drug use	2	54	5.6	5.7	5.5

Note: M= male , F= female.

To examine whether employing different coping strategies, self esteem and other variabes would lead to different aspect of burnout for teachers, a series of multiple linear regression using the three subscale scores of burnout as criteria and COPE scale scores, self-esteem, social status and income as predictors were performed. Table 5 summarizes the results of the series of multiple linear regression. In general, significant proportion of variance in the criterion variables of burnout could be accounted for by the set of coping scales, acceptance, active coping and social support which was associated with emotional exhaustion, self-esteem and active coping was associated to depersonalisation. While personal accomplishment was related to social status and income.

Table (4)

Predicting burnout by COPE scales, self–esteem and other variables

Criterion	R2	F (d.f.=15,184)	Sin Predictor	t
Emotional Exhaustion	.36	1.8*	Acceptance	3**
			Active	-2*
			Social up	2*
Deprsonalisation	.33	1.5	Self-esteem	2*
			Active Cope	2*
Personal Accomplishment	.29	2.5**	Social Status	2**
			income	2*

**p*<.05, ***p*<.01

DISCUSSION

The present study showed that Palestinian teachers in this sample reported that feelings about being exhausted in work and about working effectively and closely with their students. However, when evaluated against United Sates normative data by Maslach and Jackson (1986), Palestinian teachers scored higher than average in Emotional Exhaustion, depersonal sation but in the high range of personal accomplishment. While it has often said that teachers in Palestinian are mostly stressed because of the teaching environment (political, social and economic). Large class size, students' behavioral problems and extra work load and non-teaching duties. Also the finding of the present study showed that female teachers are burned out than male teachers this may due the multiple roles of the women in the Palestinian society. The results indicated that income and social status to be predictive scores on Personal Accomplishment. These findings indicate that the types of teachers and economic situation of the teachers in which burnout is most likely to occur. One possible application of such findings lies in targeting intervention programs to those most at risk for burnout. It is important to emphasize that the data from this study were correctional. An important area for future research concerns designing and carefully evaluating the effects of social support, copying and self – esteem, intervention programs in preventing teacher burnout using larger sample. The finding of this study need to be verified by studies carried out in other Arab countries to enable a cohesive body of research to be established on burnout Arab teachers. This would help to fill the void in the literature on burnout with respect to teachers in the region. It would also help extending the frontier of knowledge on teacher burnout.

References

Blasé, J. (1982). A social – psychological grounded theory for teachers stress and burnout. Education Administration Quarterly, 18, 93-113,

Cacha, F. B. (1981). Teacher burnout: Causes and solutions. Kappa Delta Pi Record, 18, 23, and 387-395.

Capel, S.A. (1987). The incidence of and influences on stress and burnout in secondary school teachers. British Journal of Educational Psychology, 57, 279 – 288.

Capel, S.A. (1989). Stress and burnout in secondary school teacher: some causal factors. In M. Cole and S. Walker (Eds), Teaching and Stress, pp. 36-48. London: Open University Press.

Carver, S., Scheier, F. and Weintraub K. (1989). Assessing coping strategies: a theoretically based approach. Journal of Personality and Social Psychology, 56, 267-283.

Chan, D. and Hui, K. (1995). Burnout and coping among Chinese secondary school teachers in Hong Kong. British Journal of Educational Psychology, 65, 12-25

Constable, J. F. and Russell, D. (1986). The effect of social support and the work environment upon burnout among nurses. Journal of Human Stress, 12, 20-26.

Cunningham, W.G. (1982). Teacher burnout: Stylish fad or profound problem. Planning and changing, 12, 219-244.

Daley, M.R. (1979). Burnout: Smonlderimg problem in protective services. Social Work, 24, 375-379.

Dew, P. J. (1985). Coping with work stress: an investigation of teachers' action. Research in Education, 33, 27-40.

Dunham, J. (1983). Coping with organizational stress. In: Paisey, A. (Ed) The effective teacher. London: Ward Lock Educational.

Feber, B.A., and Miller, J. (1981). Teacher Burout: A psychoeductional perspective Teacher College Records, 83, 235 – 243.

Farber, B.A. (1984). Stress and burnout in suburban teachers. Journal of Educational Research, 77, 325-331.

Folkman, S. and Lazarus, R. S. (1980). An analysis of coping in middle – aged community sample. Journal of Health and Social Behavior, 21, 219-239.

Gmelch, W.H. (1983). Stress for success: how to optimize your performance. Theory into Practice, 22, 7-14.

ILO (1981). Employment and conditions of work of teachers. Geneva, International Labour office.

Iwanicki, E.F., and Schwab, R.L. (1981). A cross – validation study of the Maslach Burnout Inventory, Educational and Psychological Measurement, 41, 1167-1174.

Jayaratne, S. and Schwab, W.A. (1984). Job satisfaction, burnout, and turnover: A national study. Social Work, 29,448-453.

Koeske, G. F. and Koeske, R.D. (1989). Construct validity of the Maslach Burnout Inventory: A critical review and reconceptualization. Journal of Applied Behavioral Science, 25, 131-144.

Kahill, S. (1988). Symptoms of professional burnout: A review of the empirical evidence. Canadian Psychology, 29, 284-287.

Kremer, L. and Hofman, J. E. (1985). Teachers' professional identity and burnout. Research in Education, 24, 57-61.

Kyriacou, C. (1980). Coping actions and occupational stress among schoolteachers. Research in Education, 24, 57-61.

Kyriacou, C. (1979). Teacher stress and burnout: an international review. Educational Research, 29, 146-152.

Mancini, V. Wuest, D., Vantine, K. and Clark, E. (1984). The use of instruction and supervision in interaction analysis, level of burnout, and academic leaving time. Journal of Teaching in Physical Education, 3, 29-46.

Maslach, C. (1978). The client role in staff burnout. Journal of Social Issues, 34, 111-124.

Maslach, C., and Jackson, S. (1978). Lawyer burnout. Barrister, 5, 52-54.

Maslach, C. and Jackson, S. (1979). Burned-out cops and their families. Psychology Today, 12, 59-62.

Maslach, C., and Jackson, S. (1981). The measurement of experienced burnout. Journal of Occupational Behavior, 2, 99-113.

Maslach, C., and Jacksons, S. (1986). Maslach burnouts inventory (2nd Ed.) Palo Alto, CA: Consulting Psychologists Press.

McIntyre, T. C. (1984). The relationship between locus of control and teacher burnout. British Journal of Educational Psychology, 54, 235-238.

Mo, K. W. (1991). Teacher burnout: relations with stress, personality, and social support. Education Journal, 19, 3-11.

Paine, W. S. (1981). The burnout phenomenon. Vocational Education, 56, 30-33.

Pines, A. and Maslach, C. (1978). Characteristics of staff burnout in mental health settings. Hospital and Community Psychiatry, 29, 233-237.

Poulin, J., and Walter, C. (1993). Social Worker burnout: A longitudinal study. Social Work Research & Abstract, 29, 5-11.

Richardson, T. M., and Benbow, C. P. (1990). Long-term effects of acceleration on the social-emotional adjustment of mathematically precocious youths. Journal of Educational Psychology, 82, 464-470.

Schaufeli, W. Damen, J. and Miero, H. V. (1994). Burnout among Dutch teachers: an MBI- validity study. Educational and Psychological Measurement, 54, 803-812.

Schwab, R. L. (1981). The relationship of role conflict, role ambiguity, teacher background variables and perceived burnout among teacher. Dissertation Abstracts International, 41, (March): 3823-A.

CITI-A VIRTUAL CENTER FOR INNOVATION AND CREATIVE THINKING IMPLEMENTATION IN THE MIDDLE EAST

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Citi School Objectives

Citi school is dedicated to the advancement of peace, tolerance, understanding and cooperation between the nations and cultures of the Middle East via sophisticated technologies.

INTRODUCTION

The Middle East has been undergoing major political changes. The 40+ year war between Israel and its Arab neighbors, has taken a new direction towards peace.
Not long ago, Egypt was the only Arab country that had signed a peace agreement with Israel. In the last 3 years, additional formal agreements have been made between Israel and Jordan as well as The Oslo agreement between Israel and the Palestinians. However, peace in the Middle East is very fragile.

The murder of the Israeli Prime Minister Rabin, and the coldness of relations between Israel and her Arab neighbors, has pointed out that peace has unfortunately not become part of the cultures of the countries in the region.
It only seems natural that in this quest for the creation of a new culture in the region, schools should serve as the forerunners, bringing in the new message of cooperation.
However, face to face meetings between Israeli students and teachers and their Jordanian and Palestinian counterpart (essential to the peace process) are difficult to arrange and sometimes do not have a continuation.

The new technologies (especially the Internet) give the unique opportunity of having people from Israel, Jordan and the Palestinian Authority, meet on line and work together on common education projects.

Citi breaks away from the notion that people must see each other face to face in order to communicate. We believe that meeting via the net, where well all are NETIZENS, without stigmas and identifying national signs, create a multicultural working environment, conducive to the new order in the Middle East.

We strongly believe that once people have a common interest and work together to accomplish a common goal, they become so involved in what they are doing that differences, are set ASIDE. A new common bond takes place.
Therefore, the educational work in Citi is conducted in multi-national, mutli-age groups, cooperating on projects of mutual interest.

Citi Schools Contents

Citi is dedicated to dealing with issues relevant to Israel The Palestinian Authority and Jordan.
Topics for learning are generated from the participants interests.
Groups of students are formed in areas of common interest.
Groups are then moderated by Palestinian, Jordanian and Israeli instructors.
Participants work on projects, suggest innovative ideas and construct an actual action.

Plan, e.g.; an Israeli/Palestinian, Jordanian and Israeli instructors.

Participants work on projects, suggest innovative ideas and construct an actual plan, e.g.; an Israeli/Palestinian/Jordanian industry built from scratch.

Participants use the Internet as their textbook and for resources, using the tools of informatics.

Specific techniques of creative and inventive thinking (as developed by the most prominent people in the discipline) will be used, e.g.; **Ideatisement** developed by Prof. Edna Aphek.

Citi's Key Pedagogic Principles and How They Evolved

Citi changes the concept of education from the 3 Rs to the 4Cs. C stands for the aforementioned connectivity we have been blessed with. We are lucky to live in a world in which new technological innovations (especially that of computer telecommunication), enables us to go beyond the long imposed limitations of time and place. This technological tool, seemingly cold and alienating, gives us an opportunity to create a virtual bridge between former enemies coming from long deeply rooted conflicts.

C also stands for Curiosity and explains why Citi's learners help design their own curriculum and work on topics they generate and not according to a fixed curriculum. Curiosity being a natural human characteristic, Citi breaks away from a too structured framework, which could stifle individual curiosity and the inborn quest for knowledge. Citi is based upon the notion that much of our learning takes places out of interest and choice.

C also stands for Creativity and together with originality, we in Citi maintain that just repeating or assembling research material written by originality is an unsatisfactory task. Its the creation of something new based on existing knowledge that gives pride to ones work.

Using the techniques of inventive and Creative Thinking has a two fold purpose, that of creating something original unique to a certain group, working on a common project, and that of furnishing people from the Middle East region with a new common language, that of Creative thinking.

Having the opportunity of showing one's original work, serves as a motivational factor. Therefore, Citi will not only act as a virtual meeting and work place, but also a

Virtual Show Case

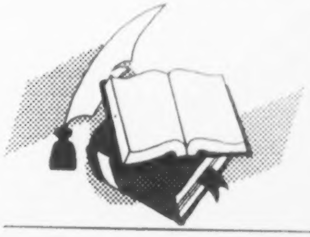
A Citi Internet site will be designated as a showcase for new ideas and inventions coming from the school, for *NETIZENS* to visit and to comment on.

And finally the C stands for the learning method we are using in Citi, that of Cooperative learning, which enables a group of learners to collaborate towards a common product, each taking part in the enterprise.

The combination of all the individual efforts, each learner approaching the common enterprise from his/hers unique perspective and with his/her unique talents or intelligence's, will create a multifaceted, complex product, bigger than the sum total (Gardner 1983).

1134

Let us take a look now at some more aspects of Citi:



Citi school and the Curriculum:

Participants in Citi school is voluntary.
Work in Citi School is conducted in interest based, multi-age groups.
Work in Citi School is not Necessarily linked to school curriculum, but will contribute to school work.
Participants in Citi School project will acquire the tools InformaticsInformation, the techniques of inventive and creative thinking, strengthen their research skills, and develop team work.

Some Technical Aspects

Citi School operates on the Internet via the Internet.
Citi School has no physical location, other than the net, and participating computers at a given moment.
The school uses a www page on the Internet as a lobby accessible to the general public. There are hyper links from the lobby to other information sites, interesting cooperative projects, and most importantly links to virtual classrooms.

Preparing for Citi School

Prior to the actual work in Citi School, Citi will run an on-line courses to all Citi School participants.
Participants are required to have a good command of the English language, mainly reading and writing.
Schools participating in Citi, should have a good command of the English language, mainly reading and writing.
Schools participating in Citi, should have at least 486 computers with 8 meg of ram and a 14.4 modem.
Internet connectivity + direct phone line.

Citi School Needs

Since until now, most of the responses we have had, are from Israeli schools, Citi needs co-operating schools in Jordan and the Palestinian Authority with creative approaches to participate in the program.

Citi School Uniqueness

In addition to Citi School being a "school without walls," Citi School works toward a common goal of its participants; A BETTER, NON-VIOLENENCETURE IN OUR

REGION. Citi furnishes its learners with the values of co-operation, tolerance, overcoming of difficulties and alternative possibilities.
In this respect Citi School operates as a change agent through youth and teachers in the region, who share a common goal.

Citi School is a model to learn from, its scope can be enlarged to include teachers and students from Egypt and the Gulf Countries.

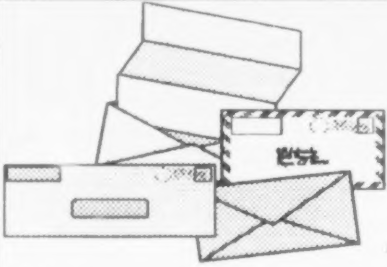
We'll take a closer look now at Citi's operational stages; The Creation of CyberCiti

The Creation of CyberCiti

A Virtual Center for Inventive and Creative Thinking in the Middle East; Using the Internet as a learning tool

General Comments

Citi will start as a pilot, with a limited number of participants from Israel, the Palestinian Authority and Jordan.
An evaluation system unique for Citi will be designed.
Evaluation and assessment of pilot will lead to improvements and changes in Citi, to be implemented Citi's second year, 1997-1998.



* Each Citi participants will be given an email address

Operational Stages

Participants will meet the moderators.
Moderators will be trained in the tools of DE and information.
and be well versed in the tools of Creative and Inventive thinking.
Participants will suggest non-political, Middle East related topics to focus on.
eg: agriculture, roads, problems, related to a specific industry, youth culture in the region, music, singers, sports etc.
Citi participants under the guidance of the moderator will choose from suggested topics and from groups according to interest.
(there might be cases in which certain participants shun group work. However, the *raison detre of Citi* is cooperative learning).
Groups will be limited to 10-15 members.
Topics for the groups will be chosen by the participants. A participants wishing to have his/her topic chosen, will have to convince the group to accept the topic by writing techniques and logical thinking.
Forums on the net will be opened according to interest groups.
all materials relating to a group will be stored in on a specific forum in a database.

learners will use e mail and Citi internet forums at this initial stage for communication..

Each group will write a detailed action plan to arrive at the final project of the group's work.

Participants will be given specific assignments and a tentative schedule will be drawn. The group will decide upon experts they might want to consult. The moderator will assisst the group in getting in touch with these experts.

Participants will start work. Participants will use the tools of the internet. A web Browser will be used as a DE learning tool. Students will post to usenet groups and email to web addresses and areas of relevance on the net. Participants will also find related materials off line (this can include non verbal materials such as photos, music, etc.) and upload the information to the forum's database.

moderators will guide and assist on and off line.

Learners will conduct scheduled chat sessions on-line
(if possible video conferences as well).

Participants will document their work from start to finish.

In order for the work done by the participants to be innovative and meaningful (more than just summary of existing materials) groups will use the various tools of IDEATISEMENT (developed by Prof. Edna Aphek), breaking away from familiar thinking patterns, raising innovative ideas and solving problems.

For example. If a group works on the topic of "planting in the Desert", they might think about possible ways of reducing planting costs by reducing manpower. In this case using the technique of reversal (and breaking away from our familiar thinking mode) might be appropriate Instead of planting trees bottom-up we will plant them up-bottom i.e.; shooting trees from airplanes into the ground. Of course, this idea involves other problems, but they as well can be solved by the numerous tools ideatisement.

There is a whole range of possible products coming out of Citi groups. Some examples are home pages constructed by participants with links to related topics, biographies, photographs, materials uploaded from off the net such as maps, drawing, music and video clips. CD ROM databases prepared by groups and periodically updated, computer programs, etc. A Citi virtual museum can display ideas for inventions and innovations. Also, students coming through program, can apply what they learn to all situations in life, and be used as tutors for the next years participants.

RESEARCH ROLE IN TEACHER FORMATION: CRITICAL CONSCIOUSNESS AND SOCIAL RESPONSIBILITY

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The formation of teachers to provide them with an awareness and feeling of social responsibility, indicates the need to offer them the possibility of performing research based on a methodology coherent with critical formation, which takes into account the multiple facets of the phenomenon of education, including a dynamic interrelationship with the cultural, social and economic universe.

As a point of departure in considering this problem, we wil perform a brief retrospective review of the history of research methods used on the Brazillian educaion scene, which are related to the various ways of conceiving teacher formation, stressing several aspects.

The *paradigm of the scientific method prevailed alone on the scene of educational* research mainly during the Sixties and Seventies.

The scientific method applied initially to Natural Sciences, has its philosophical roots in theories of knowledge which are antagonistic and irreconcilable at their extremes: rationalism, with Descartes (1595-1650) and empiricism, with Bacon (1561-1626). Descartes and Bacon sought to create a lay method which would allow man to know and dominate nature, rendering thought independent from religious authority. Descartes, the father of the rationalist trend, sees reason as the only source of knoledge, and mathematics as the basic instrument of scientific Knowledge. Bacon, the precursor of the empiricist trend, advocated the value of sensitive experience in knowledge, attributing the validity of knowledge exclusively to the verification of methodically observed facts. These two trends come down through the centuries until our days, as part of different philosophical positions.

The rationalist tradition permeates the thinking of philosophers such as Leibnitz (1646-1716) and Spinoza (1632-1677), who stressed the value of logical deduction in the acquisition of knowledge. The empiricist trend has its most noteworthy representatives in Locket (1632-1704), Hume (1711-1776), Stuart Mill (1809-1873), who especially valued induction as instrument of knowledge. In our century, we find trends considered to pertain to the empiricist tradition, advocated by thinkers such as Wittgenstein (1977-1952), Hans Reichenbach (1991-1954). Carnap (188891-1970), Popper (1902-1994), and others, who, despite marked differences in thinking, stressed mainly the observational foundation of all scientific knowledge, the verifiability of facts as a criterion of truth, the separation between judgments of fact and judgments of value, and the asepsis of scientific language, the neutrality of the researcher and the objectivity of the social facts, as well as the methodological unity of Natural and Human Sciences.

The empiricist trend penetrated the Social Sciences through Auguste Comte (19798-1857) and Durkheim (1858-1917), who proclaimed that social facts should be observed "from the outside" regarding their objectivity, like the facts of physical nature.

The scientific method contains both tendencies, the hypothetical-deductive and empirical-analytic modalities, sometimes stressing deduction, at other times induction, depending on the researcher's line, generating a type of educational research with specific characteristics. These research studiesusually portray a supposedly neutral attitude on the part of the researcher in dealing with the object of investigation, which is reflected both in the asptic and formal languuage of the reposrt and in their lack of involvement with the results of research.

The almost exclusive use of the scientific method in research during the teacher training courses prevailed during the Sixties, and maintained its hegemony during the Seventies and part of the Eighties.

The pedagogical theories based on this type of research which in turn supplied the hypotheses and explanations of the results obtained, were founded on psychological or sociological theories of a behavioral nature. These theories reduced the human phenomenon to a set of "measurable" variables,, emptying it of all of its ontological content, when its was visualized as separated from its historical context. The emphasis given to the means in detriment of the goals, in teacher training, led to a dominant concern with educational technology. Thus, it indicated an educationl practice disconnected from the true historical needs of Brazilian society, which was convenient for the political structure of the times during which the government was based on a dicatatorial system. Thus, the research developed based on this methodology did not contribute to forming a critical teacher, committed to social problems.

Despite the fact that discussion regarding the validity of applying the methodological paradigm of natural sciences to human sciences only penetrated the scene of Brazilian research on education during the last decades, concern about the reductionism which results from this application comes from remote times in the history of thought.

During the last century, Wilhelm Dilthey (1833-1911) proclaimed the use of hermeneutic procedures to acquire knowledge of human phenomena against the introduction of the positivist methodology in the Sciences of the Spirit Dilthey saw "the concrete, historical, live experience" as the point of departure and arrival of the Sciences of the Mind (Palnneer, 1986, p.105).

Later, along the same line of ideas, Edmund Husserl (1859-1938) establishes the phenomenologic method based on the assumption that we do not apprehend the objects of the outer world as they are but as bearing significance.

From this perspective phenomenologic-hermeneutic research seeks to know reality, based on the apprehension of the significance of a phenomenon for the people who experience it in a concrete situation in a given cultural context. The researcher himself is part of a sociocultural context which up to a point determines his view of the world and interprets the phenomena to be investigated. Based on this idea the researcher is released from the illusion of objectivty and neutrality of the scientific method and the natural attitude, and analyses his own involvement with the object of investigation, attempting to unveil the ideologies which have sedimented throughout his personal and social history and their implications as regards the object of investigation.

Although the influence of the phenomenology in pedagogical thinking was already present since the Sixties, mainly through Carl Rogers psychological theory, it was only in the Eighties that research appeared on the educational research scene which utilized phenomenologic-type methodologies although very rarely. Before this decade even dissertations based on the Rogerian theory presented a methodology which followed the stages of the scientific method. In this way, although the phenomenologic-type theories contributed to teacher formation in the sense that this provided the students with the appropriate conditions for significant student-oriented learning, the methodologies used in research, still pursuing the scientific method reinforced the technicist and politically uninvolved view.

The utilization of hermeneutic and phenomenologic research methods which began in the Eighties certainly signifies progress in educational research to the extent that it seeks to understand the phenomenon of education in its sociocultural context and values educational practice as a cultural action which enables political change. Despite this, the phenomenologic-hermeneutic perspective does not ensure the unveiling of social reality in its dialectical dimension, nor the committment of the researcher to the sociopolitical questions of Brazilian reality.

The prioritization of the sociopolitical question from a dialectical standpoint arose in Brazilian pedagogical thought, mainly in the Sixties and Seventies, with pedagogical trends emphasizing above all the political dimension of education, rooting their though in the Marxist tradition.

Whereas to Hegel (1770-1831), who created dialectics, the motor of History is the idea of freedom, to Marx (1818-1883) the motor of History is the concrete conditions of production of material life. According to Marx the different modes of production generate their own denial within themselves, creating elements which give rise to new forms of production, generating new economic systems around which the life of a society turns.

Following the line of Marxist thinkers such as Lukacs (1885-1971), Gramsci (1891-1937), and Agnes Heller and Karel Kosik, among others, who move away from a mechanistic materialistic concept, man is the product, and at the same time the producer of social reality. In the dimension of praxis, the process of creating social reality -man is active, and imprints his subjectivity on it at the same time this reality, which becomes independent of man, acts on him, transforming him. Overcoming both subjectivism and mechanistic objectivity, a dialectical view, as the great Brazilian educator Paulo Freire says "shows us the need to refuse as false (...) the understanding of consciousness as a pure reflex of material objectivity, but, at the same time, the need to reject also the understanding of the consciousness which confers on him a determining power over concrete reality (Freire, 1993, p.101).

The form of thinking about what is real in a dialectical manner carries an implicit logic from which categories emerge that guide the process of investigation. The category of concrete totality leads us to understand human-social reality as a cohesive whole, in which each element is in one way or another related to each element and on the other hand that these relations in the objective reality itself, form concrete correlations sets, units which are interconnected in completely different ways, but always determined (Lukacs, 1979, p.240).

Beginning with this concept of what is real dialectically-oriented educational research does not view the phenomenon investigated as separate from the social whole in which it participates but seeks to understand it in its relationships with the historical determinants which generated it.

The category of contradiction shows us the need to carry out a detailed analysis of the historical sequence of a phenomenon as to its inception and development, to understand its meaning and objective contents. At the time of analysis, the social facts are isolated, decomposed and ordered by concepts, sot that the social scientist may get to know their historical specificity, univeiling concrete contradictions discovering their internal connection, e.e., their ability to reflect the concrete whole of which they are a part. Fluctuating between fact and context, analysis involves a movement "from the part of the whole and from the whole to the part" from the essence to the phenomenon and from the phenomenon to the essence, from totality to contradiction and from contradiction to totality, from the object to the subject and from the subject to the object (Kosik, 1976, p.30).

Dialectical educational research thus seeks knowledge of educational phenomena, viewing them in their historical sequence, identifying the contradictions which drive their development always seeing them in interaction with the society of which they are a part. Thus, the phenomena related to education and teacher training are viewed and interpreted based on their relationship with the economic foundations of Brazilian society, its social classes and its historical and cultural determinants.

There is no doubt that dialectical thinking has brough enormous progress to educational research in Brazil: concerns about the political dimension of the phenomenon of education, providing the effort of adopting a critical position on concrete problems of educational reality and the search for ways to achieve real change. This attitude lead to progress in teacher training, in the sense of indicating the need to offer them conditions which will make it possible to develop a critical consciousness and social responsibility.

In the last few decades, according to a study performed by Gamboa (1989), the evolutionary trend indicates a constant increase in the number of research studies employing a dialectical approach. However, what this author found is that, despite the fact that the theoreetical reference presents a critical character in many research studies which consider themselves dialectical, the object of investigation is treated as something inert, ahistorical in which mechanical relations of cause and effect predominate, instead of dynamic relations with interdependence and reciprocity. Thus, these studies are very little different from those which employ the traditional scientific method, although they make use of concepts taken from Marxist theory (Gamboa, 1989), and therefore do not provide an effective contribution to the formation of a critical teacher, committed to social change.

Finaly, we must mention no matter how briefly, a few implications of the persistent penetration of post-modern ideas on education for educational research. The post-modern criticism of the separation between higher culture and popular culture has reinforced in research the tendency to think again about educational matters as to their cultural specificity. This trend had already appeared under the influence of anthropological current inspired on pheonomenology. This perspective supplies the necessary conditions to interest research in turning to problems of education which arise from spontaneous interaction between social subjects in daily schoolwork. Questions related to the formation of subjectivity and consciousness thus become objects of educational investigation broadening and deepening knowledge regarding education and teacher formation, in its dimension of particularity and concreteness.

References

FREIRE, Paulo. Pedagogia da Esperanca-um reencontro com a pedagia do oprimido. Rio de Janeiro: Paz e Terra, 1993.

GAMBOA, Silvio a.S. A dialetica na pesquisa em educacao. In:Metodologia da pesquisa educacional, FAZENDA, Ivani(org.), Sao Paulo: Cortz, 1989.

KOSIK, Karel, Dialetica do concreto. Rio de Janeiro: Paz e Terra, 1985.

LUKACS, Georg. Existencialismo ou marxismo? Sao Paulo: Ciencias Humanas, 1979.

PALNNER, Richard. Hermeneutica. Sao Paulo: Martins Fontes: 1986.

VIEIRA PINTO, Alvaro. Ciencia e existencia. Rio de Janeiro: Paz e Terra, 1985.

ARTISTIC APPRECIATION AND EXPRESSION, CURRICULAR PROPOSAL FOR PREPARING TEACHERS INTO PRE-SCHOOLER EDUCATION

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Mexico

INTRODUCTION

School Normal Federal de Educadoras MAESTRA ESTEFANIA CASTANEDA from Victoria City, Tamaulipas, Mexico; such specific function is forming teachers into Preschooler Education; wants to every body know our school's pedagogical work experience, according to the requirements of the update educative politic of our country shaped in the Educative Development Program 1995-2000, by the nation Executive DR. ERNESTO ZEDILLO PONCE DE LEON, were is presenting us the responsibility of insurance the educative efficiency, developing improvement programs, proposing innovations that go around looking for new knowledgments forming the future teachers integrally.

Our curricular proposal consists on include activities with laterals relevants qualitatives' criterials to enrich Artistic Appreciation and Expression's learning of the 280 students future preschooler teachers which age is between eighteen and twenty-two years old. Has being integrated a musical group "Show Band Educadoras" as a teaching-learning experiment into musicalization of children's compositions and creation of new melodies with update, Tamaulipas, our Mexico's rhythms; which musical products respond to characteristics of preschooler school's didactical supports and for the courses of Teachers Laboratory and Learning Contents from the prevailing Studies' Plan of Preschooler Education Degree.

We have being working on this since January 1994 until today, it is a Priority Project of Academic Support with activities out of curricular time, under design and applications of easy methologies, motivating students' creative participation looking for educative quality, responding with solidarity and justice, precising necessities since the curriculum as a social function, toget a graduation profile that favours the development, habilities and vocation for preschooler education, demostrating the creative enthusiasm that allows them to go up into a superior level of human existence.

Develooppment Of Curricular Proposal Artistic Appreciation And Expression Musicalization Of Children Compositions And Creation Of New Melodies With Update, Tamaulipas, Our Mexico's Rhythms

The World Of Sound Is A Light Bubble Into The Silence Of Infinite
Rabindranath Tagore*

I. JUSTIFICATION

Supporting all courses and especially the Specific Formation Area into the Artistic Formation line from the Studies Plan of preschooler Education Degree, forming professionals to exercise teaching into preschooler education with an attitude disposed to pedagogical innovations, developing their capacities as change agents, reflexives, criticals with ethical values for Learn to Be, waking up their energies, making them more useful and free, even as a culture generators as users of it; to Learn too Do and Learn to Learn understanding the world they are living in, in which they are depending of and in the one they will act in a responsible way, interested in a personal and professional constantly suppuration into the permanent education frame; joining personal characteristics suggested by the UNESCO and the OMEP (World Organization of Preschooler Education):

"Biological Maturity, Mental and Social Maturity; stability and affective warm, identification capacity with the child; good level of emotive power, softness in their personal reactions and relations; besides happiness and generosity".

In our school center, according to past reflections, we labor into an integrated environment in which are sharing growing and commitment purposes, working under performance of individual goals established by the same institution, we allowed ourselves to do the following pedagogical proposal, on the basis of chores that are sang into kindergartens of our State those have a gentle and slow rhythm to the different melodies and rhythms that children usually listen and sing into their social environment.

Popular Mexican Music has a variety of ways that reflect different manners to express emotions, replesented into rhythmical figures: waltz, corridos, polkas, sound, tapatio, huapangos; and in our state Tamaulipas: cumbias, corridos, shotis, slow music, pregnant of musical accords.

That music listened at home should go to the kindergarten so it becomes to be one more expression way of feelings and emotions, because through songs and games preschooler children acquire significative learnings.

Our starting point was the necessity of change, to make more rhythmic the songs that already exist, also, create new rhythms directing them to vertebrate lines suggested into the prevailing Preschooler Education Program, with the finality that those rhythms constitute a didactical tool into the programmed activities of working projects as in the free activities and into routine activities that teacher does, so, the child develops his personal identity and authonomy and his socialization, his creative expression through language, thoughts, body, same way; develops a sensible close to different fields of art and culture and his relationship with nature.

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* Indian writer and Peot, Literature Novel 1913

II. OBJECTIVE

Integrate Strategies for our students to Produce Children Music as A Didactic Resource for Preschooler Education

All activities that a child does can do them singing on a spontaneous way, well directed by his teacher, will favour sensibility to know and like music giving him a list that satisfy his emotional expression necessity.

Into modern life silence is rear and can not be the kindergarten isolated, that is why the teacher would have in the classroom different kinds of music that accompany the development of each day activities, example, slow or tranquil music when activities demand reflection and rest, happy music of prevailing rhythms to realize rhythmical and body expression exercises for greeting early in the mornings and good-byes. For this is recommendable to use tape recorders, cassettes, and appropriated records.

Some Mexican teachers since last century were worry for keeping values and Mexican culture through music. One of those was, Estefania Castaneda, a Victoria City, Tamaulipas' teacher, whose name proudly has our school, she was pioneer on children education in our state, she recommended: listen to music, hear songs, sing easy chores, march with music, recognize equal and unequal notes, loud and soft; from her, we have a music legacy of sleeping songs that today are used into kindergartens.

Besides it's art condition, music is a socialization way; dances, games are strategies used into preschooler level. Updates are just a few kindergartens that have a piano and a piano player. That is why it is necessary that the teacher can play a musical instrument that help children to sing and that utilize it to accompany rhythms, dances and games; besides, is necessary that reads, and solfa children melodies. Since then, the importance that each teacher of preschooler education has a musical education, ear education, rhythm and body expression.

The last reflections allows us to program and realize the following tasks:

III. TASKS

1. Integrate musical group with our students, becoming a priorital project of our school as a result of talent, capacity, discipline and responsibility of our students and teachers.
2. Project Denomination; Show Band Educadoras, were it's appreciated music, developing their musical capacities and achievement products in children chorus.
3. Acquiring musical instruments: guitars, drums, keyboards, accordions, triangles, tambourines and others.
4. Implementing specific learning strategies so the selectionated students according their individual habilities and attitudes learn to play a musical instrument.
5. Selection and classification of the group members voice.
6. Utilization of easy techniques for teaching chores to preschooler children.
7. Application of musical products as didactical tools for our students in their Usual and Intensive Practices as by working teachers.
8. Realization of didactical events characterizing each melody, linking theater, dance, plastical arts, and music creativity between our school students and preschooler children.

9. Impact of our Show Band into society, transmitting culture, benefiting family parents, today students, and future students, our students and working teachers.
10. Permanent looking for educative quality participating into teachers' teams linked into intitutional goals, for tangibles' musical products.

IV. METHODOLOGY

Teaching methodology is through Teaching Instruction Modules were objectives are clearly settle giving emphasis so each student reaches the proponed objectives in permanent practices by a time of four hours daily, during four days a week at evening time, also Saturday sessions to concrete individual teaching, were each learning experience means curriculum, better said; "Way that student should go on" for his plenty and efficient realization.

Investigation techniques applied are: Word and Music Innovation, Intuition and Observation, Children Chorus Compilation, New Chorus Invention, Formation to Dominate an Audiency.

At same time students appreciate music and develop their musical aptitudes for musical expression through voice and a musical instrument execution: guitars, drums, keyboards, accordions, triangles, tambourines and others.

To learn to play a musical instrument into a constructive learning environment, is one of the best learning ways, they are turned into valuable multiplicators, have took an active roll teaching their classroom mates; they have formed a working team: sing, dance, play, and characterize each children melody, same time, make up new melodies with didactical basis, instrumenting them and with a deductive ability are canalized for direct and integrate teaching to preschooler children; this new musical compositions are with toady's rhythm with out loosing children formation, It means: that the child thinks by himself, keep good habits and values, knows the difference of games and realities.

It is optimize each student as a feedback fountain, helping the music teacher that is a facilitator and guide; with out stopping their curricular formation, participate in all supporting activities of the Show Band harmonic group, example; realize physical exercises, of body cleaning, beauty, face and body care, personality and expression, nutrition, audience dominium, relationship student-student, student community; participate designing the apropriated clothes; actions that they realize with creativity coordinated and advised by different teachers teams in charged on it, precising norms, designing results, directed always by the school board of the school applying the quality rules: Planity, Do, Revise and Act.

Has been utilized the Projects' Method because it stimulates initiative and confidence in each student on themselves; stimulates creative instant, believes on them, and convince them that they shure can, conduce students to formulate defined purposes, it means, exists trust in efficiency.

To accomplish this task we have received the valuable support of our state's government.

> *"We have to stimulate this group that is going to make possible that school, since it's beginning became attractive to children, being a magnet; that children go happily to school, satisfied, knowing that they*

*will enrich themselves, that their spirit will be nutried and by this, they would be balanced humans being in harmony."***

At same time, from the Education, Culture and Sports' Secretary, Professor Jose' Luis Garcia Garcia, also from the Culture and Arts' State Coucil and from our students' parents.

V. CHARACTERISTICS

This project's work, developing each of the Show Band Educatoras' tasks, is a whole of activities programed, realized and evaluated, integrates a different characteristics' project: it's Esthetic, Didactic, Recreative and Constructive-Socializator.

a. Esthetic Project: because the activities whole have as product of satisfaction, that is the circumstance of music recordered, children music which purpose is to develop preschoolers' sensibility because in it are implied the contents to stimulate children fantasy, so the children play and sing.

b. Didactic Project: because has a essential purpose acquire knowledges and habilities to demonstrate children the world and life objectivity; exercise children language's use, enrich his vocabulary, develops socialization by groupal work and by free expression of their ideas; because it is applied into the Rhythms, Songs, and Games' sessions, in kindergartens, space were our students actually realize their pedagogical practices and after their graduation, as a teachers would be the place were they develop their educative practice.

Rhythms activities last fifteen minutes during the morning; At break time children listen to games music, after break they sing sleeping music to relaxation and for farewall they sing happy chores.

It's necessary to have a musical material variety for not to became into monotony, there is the importance of advise and knowledgement of the future teacher about Musical Education, that through musical instruments support large and small muscles motricity by moving their body parts: head, shoulders, hands, legs; integrating children's dances and orchestals with toys or percussion instruments which develops memory, confirms rhythm sense and gives importance to team work, favours breathing and voice articulation, also, are detected motricity, hearing, or language problems.

Is suggested to our students to utilize the teaching technique of children chores according to logical knowledge formation, initiating by Motivation with easy stories; Sensitivity, to wake up child's interest for listening the complete chore to know it and identify it; Repetition-Memorization, intones verse by verse, singing first verse and repeating it; singing second verse and repeating first one and second one; it goes on until children memorize complete the song that should not being longer than four verses; Dramatization, intone and escenify the chore, realizing body movements according characters that talks the word about, rhythm would be in each one of the child's movements, because children love to sing, play, imitate works that adults do, take care of animals, are interested on the weather, the day, the sun, collect bugs and flowers, climb on a tree, watch birds, etc.

** *Manuel Cavazos Lerma, Tamaulipas Governor 1993-1999.*

Clap is the child's first response to sound stimulus, putting both hands at the same body distance will help him get out of inhibitiones; starting on claps would live the three basic elements for musical initiation: Pulse, Accent and Rhythm. Four year old children can practice pulse with melodies and percussions example; walking listening to a sound and stopping when it finish; moving hands without stop until the song is over. Can choose some songs, example: Good Morning, The Blue Parakeet, The Summer, The Winter, (Cassette number one and Cassette number two) into the recordered music of the first cassette the melody with out word (music only) pulse is made accomplishing words and phrases, this way, children play making up chores with another children, those ones were are their interests' implied.

Accent can be defined as an underlined pulse in the melody or song, ask children to clap ones when music is loud or when music is soft, to do this are chosen songs were accent is clearly heard, example; The Train, My Dog Caiserin, The frogs, The Car (Cassette Vol.2, Educadoras '95).

Rhythm implies the temporal aspect of music, times, accents, rhythm; child has to play with his body on movement, with his voice, and with sounds of instruments close to him, example: point out rhythm on songs, point out rhythm naming his class mates, play with easy rhythmical riddles which content be accord to his self interests; simple language and comprehensible easy to memorize tha's why on the children songs of our cassettes we have used again the regional folklore and created new melodies with characteristics of children's songs.

c. Recreative Project, talents are expressed combining dance, theater, and plastic arts, begins a communication with local children in presentation of didactic concerts were each melody is characterized by the Show Band students and by the teacher and dance groups, it allows to appreciate a Recreative show in festivals and commemorations, organized in and out school on institutional trajectory.

Modernizate children music has been a big space to foment culture, fortify integral formation of children, and students integral formation, future teachers into preschooler education.

d. Constructive-Socializator. Our school responds orientating its labour through goals and objectives propiciating into our students the values' acquisition, sametime, looking for educative quality we pretend through cience and art development form integrally our students because it has come to satisfy necessities of: integration of musical group whose musical products reune characteristics of didactic supports to preschooler children; from this innovation can be resume who are the beneficians:

- Today students that are into preschooler education, future students, parent of children, preschooler education centers, the community were they are placed in.

- Our student's parents, whose trust plenty in our institution and share formative function of their daughters.

- Today students, future teachers; the localities were our students live because we share and spread our achievements.

- Society were they develop as educators, that's why we consider that the result of our curricular proposal supporting artistic appreciation and expression do not finish when the students graduate, because they integrate society which they have being formed to.

VI. ACHIEVEMENTS

I. QUALTATIVES ACHIEVEMENTS.

Quality improve in our school is centered on satisfy each time better the beneficians all ready mentionated, with out loosing the identity value: teachers and students, integrants of a forming teachers' school which participation continues, were decisions made and expression opportunity and communication are the basis of authonomy in the curriculum development acomplishing it's social function, in the relations of personal slope in the classroom and their relations with community looking for continous improvement and increase productivity.

Each one of the activities is a learning experience, students and teachers' groups cohesion develops students potentialities, based on problems resolution, generate and classify alternatives.

It is a dynamic learning group, each one of the integrants compart objectives and goals, accomplish their function with ownership sense, which allow them to think in group, indispensable activity looking for quality; because quality philosophy maintains that people realize when participate actively on their welfare.

Our students participation generates commitment and satisfactions, answers participating in harmony, pointing out goals on short and long time, same that are taking to practice and evaluated periodically.

II. QUANTITATIVES ACHIEVEMENTS.

Quantitatives achievements of all this project activities of musicalization of new rhythms, we can express:

a. The record of three cassettes of children music.

It's a legacy for the children, they like them, permit capitalize the enthusiasm and children interests, didactically supports the Preschooler Education program about realization of pedagogical projects.

Musical product achievement is of three children music cassettes: on November 1994 came out the first musical material with new rhythms, happiest and contagious it had being named "Habits and Values' Cassette" motivated on ten melodies: Good Morning, Early, Smell Soap. The House, What Have, The blue Parakeet, Who taught you, The Monkies, I am Miguelito, The Pinata. The First Cassette has being reordered first the melody sung and after it only the music. To accomplish this First Cassette, was elaborate a Didactic Pamphlet were are expressed the foundation of our work and the integration of our Show Band Educadoras; expresses teaching methodology of chores, general objectives of melodies, word and music in stave of each one of them. The Didactic Pamphlet purpose is to establish a communication with professionals in preschooler education to promote and develop the focus of new rhythms applied into children melodies.

THE SECOND CASSETTE Educadoras '95 denominated the "Year Seasons": Fall, Summer, Spring, Winter, My Dog Caiserin, The Train, The Car, The Sleeping Song, Let's go to March, The frogs; on this melodies word and music were elaborated by integants of the Band and their music teachers.

Work continues, students say good bye because their graduation and new ones come in with same enthusiasm, no break time.

THE THIRD CASSETTE Educadoras '96 is a musical material of children rounds: The Blue Doll, Mambru, Mrs. Blanca, Lets Play this Round, The Wolf, Rain Rain, Rise with Milk, The Sea Snake, Juan Pirulero, Pars and Nones and a Popurri.

The purpose of each round is to support psychomotor education so the child learns to coordinate with style, single and movement on his body parts, under rhythms of rounds arise a spacial orientation, rounding the round, jumping the children together developed equilibrium and their harmonical integration.

Froebel said "to play is the highest expression of the child development", it is not only entertainment it is also a way to develop his potentialities and qualitative changes in the relationship with other people; it is also a discipline frame were child learn to respect agreements, to form collective feeling play at this age is symbolic because child substitutes an object with otherthing that is important for his psychical development.

b. Festivals honouring children

Had being four big public festivals purposely on children happiness with an audience aproximated of five thousand children and one thousand parents that enjoysseeing their children happiness.

c. Meetings of Institutional Trajectory.

Our community receives our work bonds, values the efforts of personal, students and parents of our school we had realize five activities that promote thecoexistence of people clapping each one of the presentations of our music Band, giving example of work, quality, discipline, and projection for the welfare of children education and by consequence of forming teachers' school. Audience three thousand people between children, teenagers and adults.

d. Didactic Music Concerts.

Coordinated with the State Government, The Education, Culture and Sport's Secretary, the Culture and Arts Council; we had realized eight entertainments were are characterized each one of the children melodies, with our students that play and dance in company of invited children from different kindergartens of the city; entertainments are specially for children, they receive gladly and happy the cultural window reflected by our students, we can say that this didactic concerts enrich our work because are fruits for new products.

e. Students integrants of the group Show Band Educadors.

In 1994.- twenty with musical instruments and forty voices.
In 1995.- eighty with musical instruments and eighty voices.
In 1996.- one hundred musical instruments and eighty voices.

f. Students participants on recording music.

First Cassette: eighteen with musical instruments and fifteen voices.
Second Cassette: nineteen with musical instruments and fifteen voices.
Third Cassette: ten with musical instruments and nineteen voices.

g. Teachers that participate on this musical project.

Music teachers.- three, with a time of 46 hours a week totally, their preparation into music field is very relevant by their experience into guide teaching of easy methods and treal to learning groups, because each one have a music club so the participation product will be capitalized, and canalized to integrate the Show Band in an evening time in cocurricular activities.

Teachers that support Show Band into linking activities.- are seventeen, participate with their time of class supporting this musical complex referring to required atmosphere out of musical preparation, example: sports, health, clothe, makeup, personality, etc.

h. Countries, Entities and Municipes that have our musical material:

Forty-three, totality of municipes in our state; thirteen Mexican Republic Entities; borders has been open to different america central countries: The Salvador, Costa Rica, Guatemala, Honduras, from whom we have received especial recognizions for our labour on welfare of children music.

i. Project Financial Sources:

Aproximately $14,120 USD. (fourteen thousand, one hundred and twenty dollars).

j. Proposal goal for june 1997.

Enlarge the distribution cover of music, keep developing children songs with new rhythms of update times, growing up the number of students that learn to play a musical instrument: on first grade 25% of 60 students, second grade 50% of 62 students, third grade 75% of 88 students and on fourth grade 100% of 68 students.

CONCLUSIONS

To children songs' musicalization and creation of new melodies with rhythms of todays, had being realized different tasks since 1994, which product is the recorder of three children music cassettes and a didactic pamphlet, this material has been distributed in kindergartens all around our state, also into different centro america's countries and in texas state U.S.A. establishing unity bonds in our students with children of the world, it is a product of cultural projection in benefit of today and tomorrow children.

The musical group denominated Show Band Educadoras is priorital project in our school center, it is formed by twenty students that execute an electronic musical instrument nineteen students that with their beautiful voices sing children melodies, eighty students that participate characterizing each one of the melodies. It is a multiplicator project of knowledgements because shares knowledges with their partners enthusiastically, in the artistic activities going in communication with natural and social atmosphere in the permanent education frame, better said, acquiring knowledges during all life.

Exists equal opportunity to access in the Band, considering their characteristics integrating teams of constructive work, working in the accomplish of individual and institutional goals, emphasising that musical products respond as a didactic resource in the biopsychosocial development of children.

Share efforts and purposes, teachers and students, school board, labour under the same ideal of belong to an institution that dedicates extraschool time in benefit of educative quality, sharing curricular reconstruction ideology effective participating to arise in to the characteristics suggested by the UNESCO and the OMEP (World Organization of Preschooler Education) for future educators.

Tasks that integrates our proposal arise from the necessity that the preschooler child has of non phase out his family atmospher; music heard around him should go to kindergarten to proportionate happy games and sgnificative learnings.

Are participating in a responsible way to ensure efficiency in this project of academic improve, Artistic Appreciation and Expression as a Curricular Proposal, since the structuration, operation and achievement into a knowledgment space in teachers formation to preschooler education such products are applied in operation reality participating with a clear vision of culture.

Utilized methodology is integrated direct teaching supporting music, rhythms, songs, and games, plastic arts, dance, theater courses; applying individual and groupal strategies so each student can play a musical instrument with harmonic fluid pregnant of creativity, with constant personal superation interested on integrate to society that is in permanent transformation.

New musical compositions' realization whose words foment habits, values, knowledgements for the teacher to interactuate through observation, clasification, analisys, and evaluation as didactic strategies to increase preschooler children potentialities.

A permanent attitude demonstrated in the educative quality process was to believe in our students motivate them with enthusiasm, we share and spread achievements to extend the consensus into participative process to schoolar quality, finding out and experimenting on the way new educative actions, considering our school as a giving services organization, with faith in ourselves, giving fruits with respect, identity, dignity and creative participation.

Our gratitude to the Government of our state for allow us continue with the specific tasks to transmit culture on education benefit of Tamaulipas and Mexico.

References

CASTILLO, Cebrian Cristina and others.- Preschooler Education, Methods and Techniques. Ed. Ceac, 1985. Spain.

FAURE, Edgar and others.- Learn to Be.- Ed. Alianza University UNESCO 1991. Spain.

G. Nerici Imideo.- Teaching Methodology.- Ed. Kapelusz, 1985. Brazil.

GOMEZ, Palacio Margarita and others.- The child and his first years in school Ed. SEP. Teacher Actualization Library, 1995. Mexico.

SANTOYO, S. Rafael.- Reflexions about Learning Groups coordination. UNAM, CISE, Rev. Educative Profiles, 1981. Mexico.

SCHMELKES, Silvia.- To a better quality in our schools. ED. SEP. Teacher Actualization Library, 1995. Mexico.

SEP.- Preschooler child development. Ed. Fernandez Editores, 1992. Mexico.

SEP.- Principals' Guide.- 1992. Mexico.

SEP.- Preschooler degree studies plan. 1984. Mexico.

SEP.- Preschoolar Education Program. Fernandez Cueto Editores, 1992. Mexico.

Magazine Education 2001, No.13, june 1996. Mexico.

Magazine Mexican of Pedagogy, year VI, No.21, 1996. Mexico.

Magazine Pedagogy, Vol.5 No.16. National Pedagogic Univ. Mexico.

MOVING FROM ISOLATION THROUGH CROSS-CULTURAL PARTNERSHIP AND LINKAGES IN TEACHER EDUCATION IN SOUTHERN AFRICA: EXPERIENCES FROM THE UNIVERSITY OF NORTH-WEST, SOUTH AFRICA

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INTRODUCTION

As a result of international political, economic and cultural boycotts during the apartheid era, South African educational institutions, both black and white, were isolated by other institutions within and outside Africa. The isolation was felt more by the Historically Black Educational institutions in the former Black Homelands such as the Universities of Bophuthatswana (now University of North-West), Venda, Fort Hare, Transkei, Zululand, the North, Qwaqwa, etc.

Firstly, the Homelands in which they were situated were internationally perceived to be part of South Africa's apartheid system. Their political independence was not recognized by any other country expect South Africa itself. Secondly, as a predominantly black institutions, they were neglected by the apartheid government in terms of educational resources and marginalised by the predominantly white educational institutions because of the apartheid racial system of separate development.

This paper discusses the experiences of the University of North-West (Former University of Bophuthatswana) in its efforts to enhance academic excellence in teacher education and promote a cross-cultural perspective of the teacher education curricula in the North-west province of South Africa.

The Need for Cross-Cultural Institutional Linkages

As a result of the colonial history the Apartheid system of separate development among the different races and ethnic groups in South Africa, there exists ignorance and prejudices are rife among these different socio-cultural groups within South Africa.

It is notable that history books particular were written by white academics who depicted the white man's viewpoint of the South Africa's history and Africa at large, in the defense of the cultural, political and socio-economic interests of the white minority group. The low level of knowledge in the South African schools about the history of their country and the rest of the continent is the result of a systematic process distortion.

The institution of separate educational systems for the different races and ethnic groups by the state including teacher education perpetuated cultural suspicion, prejudices and hence divisions among the different peoples of South Africa, The system of Bantu Education which was designed specifically for black people emphasized the subservience and inferior position of the black people to study science and technology it also provided scanty information to the school children about the history, geography, political and socio – economic development of the rest of the continent .

In terms of the tenets of the apartheid education system South Africa was not regarded as part of Africa. The neighbouring countries of Southern and Central Africa were rather portrayed as centres of poverty, squalor, terrorism and communist insurgence which threatened the existence of white South Africa. The unintended effects of the international cultural, political, and economic isolation of South Africa, countries had limited knowledge about South Africa including its educational system. The picture they had about South Africa been one presented by South African exiles and other anti-apartheid movements.

South Africa is now a democratic country, striving to be politically, economically and culturally part of the African community of nations. This implies that the curricula at all levels of the educational system including that of teacher education should be expanded and reformed to promote a universal perspective. This aspect was, for obvious reasons, not given a high priority by the South African apartheid regime. As South African higher education emerges from a period of relative isolation it confronts the reality of accelerating changes in culture, communication and production, changes characterized as "*globalisation*" (NCHE, 1996).

The Affiliation of Colleges of Education to the University of North-West in the North-West Province

When the then homeland of Bophuthatswna (now part of the North West Province) opted for political independence from South Africa in `1977, one of the first policy measures taken by the homeland government was to review the Bantu Education system created under the system of apartheid. As already noted the system of Bantu Education was inferior version of white education provided by the apartheid regime for the black people of South Africa.

The Homeland government appointed an Education Commission under the chairmanship of Professor Lekhela to review the educational system and make recommendations. The Commission came to be known as the Lekhela Commission. As regards Teacher Education the Commission had the following to say:

> *"One priority above all others in bringing a new spirit and approach to education is to give urgent and immediate attention to the position of teacher, his academic background, his professional training, his further development during his teaching career, the conditions under he works... " (Talyor, 1987).*

The commission (NCHE, 1996) came up with the following recommendations for teacher education:

- The teacher training colleges were to be renamed Colleges of Education;
- Teachers and teacher education were to be sensitive to the new needs and changing socio-economic and cultural environment;
- Teachers should be competent and effective professionals, both inside and outside the classroom;
- In order for the colleges of education to raise the status and quality of heir work, they were to be affiliated to the Institute of Education of the University of Bophuthatswana (now University of North-West);
- The Institute of Education was to have a research and development function, and provide assistance in curriculum development, techniques and material, testing and evaluation, training workshops and seminars to the colleges.

The objective is to produce teachers with a new and broader outlook of South Africa as one nation and as part of the African continent. The paradox of this new philosophy of education is that the objective of the creation of homelands (e.g.Bophuthatswana) under the apartheid system was to inculcate in black people those values that reinforce their subordinacy and not to give them a universal outlook and to make them independent thinkers.

The vehicle of the new philosophy of education is the Institute of Education at the University of North-West which has become the centre of provincial school and teacher education curricula innovation and planning since the time of the former homeland of Bophuthatswana (now part of the North-west Province).

The Establishment of a New Structure of Curriculum Development for Colleges of Education

In accordance with the recommendations of the Lekhela Commission, the former University of Bophuthatswana (now the University of North-West) through the Institute of Education was given the responsibility to guide academically all tertiary education in the former homeland of Bophuthatswana (now part of the North-West Province) in matters pertaining to curriculum development. This includes both teacher and technical education. The Department of Education was to be left with the responsibility of appointing teachers and financing the education system.

At the Institute of Education (University of North-West) syllabus panels for each teaching subject at the affiliated colleges were established. Each panel consists of subject tutors from the affiliated colleges, an academic staff member from the School of Education, University of North-West, teaching that particular subject, and a representative from the Department of Education. This provides subject teacher educators with the opportunity to contribute to the structures and contents of their respective subject syllabi.

The designed syllabi are then submitted to the curriculum committee consisting of all chairpersons of the syllabus panels and representatives from the Teacher Education Division of the Department of Education.

The Committee is responsible for checking and authenticating the syllabi. The latter are then put into a curriculum to be submitted to the Board of the Institute of Education. The latter checks-up the work of the Committee before presenting it to the University Senate for approval and implementation.

In comparison to the apartheid Bantu Education system two notable changes have taken place in the current organization of teacher education in the North-west, especially in the area which was the former homeland of Bophuthatswana. First, in the Bantu Education system the subject tutors in the Teacher Training Schools had no say in the designing of the curriculum. Presently, through the syllabus panels at the Institute of Education, the tutors from the affiliated colleges of education are actively involved in the designing of the syllabi for their respective teaching subjects.

Secondly, under the new democratic dispensation, the education policy aims at developing curricula, especially in history, geography, economics, languages etc. which will revive the positive values of the history of black people and give the children the opportunity to learn the geography, history, political and socio-economic development of other countries and peoples outside the borders of South Africa.

This is made possible by the fact that through the Institute of Education at the University of North-West, the teacher educators are directly involved in the formulation of the syllabi for their respective subjects.

The Vice-Chancellor's Advisory Committee on External Relations On the basis of the historical isolation of the University of North-west during the apartheid era, the University authorities, especially the Vice-Chancellor realized the strong need for the university to forge linkages and partnerships with other institutions within and outside South Africa. An important step towards realizing this objective was the establishment of an advisory committee on external relations. The Committee is composed of representative from all the constituencies of the university. This was based on the fact that linkages and partnerships should not be for academic staff only but should include administrative, technical and secretarial staff who had to be developed in tandem with professional instructional staff as a way of boosting both individual and institutional capacity.

The priority areas for linkages include exchange of information on teaching programs and institutional governance, staff-student exchanges, joint publications, collaborative research, joint conferences, workshops, seminars etc, joint resource mobilisation and utilisation, etc.

Linkage is colloquially used in a rather loose sense with less precise connotation than mere "contact". In a more formal sense linkage denotes a regular programme of exchange between communities or organizations for exchange of information and cooperation in respect of various ventures. For example institutionalized arrangements to link teacher training colleges and university faculties or institutes.

A linkage can also exist in the form of data base established to provide scholars and others with access to research resources.

Where linkages are formalized to include the subject of agreements with goals, budgets and operational modalities, they may be considered to be partnerships.

Partnerships like linkages may be of weak or strong variety. Their role may be confined to the exchange of information. A slightly stronger version of partnership may be where organizations agree to coordinate their activities only moving forward with their own programme after consultation and reference to the action of other partners. The strongest form of partnerships would be where there are cooperative and joint activities, which provide common services, and organized joint programmes. In this case there is a joint commitment and responsibility which may extend to joint financial responsibility and common ownership of resources (Williams, 1991).

The Vice-Chancellor's Advisory Committee on External Relations has already established linkage contacts with the following institutions: Texas Southern University, Bowie State University, Eastern Connecticut State University, University of Botswana, University of Lesotho, University of Zimbabwe, University of Technology, Sydney (Australia), Bethany College, Florida, University of Venda (South Africa), University of Fort Hare (South Africa), University of the North (South Africa). A memorandum of agreement has already been concluded with the University of Eastern Connecticut (USA).

The success of these linkages will benefit the quality of teacher education through the Institute of Education. The latter is actively involved in linkage negotiations with the various projects related to teacher education with the Universities of Venda, Botswana, Potchefstroom, etc.

Formation of a Consortium of Southern African Universities.

During the establishment of the Vice-Chancellor's Advisory Committee on External Relations, the Vice-Chancellor of the University of North-west stressed the significance of forging links with neighbouring academic institutions in Southern Africa because of their proximity to south Africa and their extensive experiences in linkage programmes. Unlike in South Africa higher educational institutions in the neighbouring countries were never subjected to institutional racism and isolation through cultural boycotts.

On 18 October 1996 a meeting of the Deans of the Historically Black Universities in South Africa and the University of Botswana was held at the University of North-west in Mmabatho. The objective of the meeting was to discuss the question of linkages and the formation of a consortium of Southern African universities. A number of issues were agreed upon at that meeting.

Firstly, there was a unanimous agreement on the idea of the formation of a consortium of Southern African Universities, i.e. South Africa, Lesotho, Swaziland, Namibia, Botswana and Zimbabwe. This is due to the following advantages: it is usually easy to mobilize funds from donors when institutions approach them as a group; it will enable the participating institutions to share expertise and experiences on different issues of common interest including institutional governance; it will be possible to organize joint conferences, workshops to minimize costs and avoid duplication of efforts.

Secondly, a sub-Committee composed of two representatives from each of the participating institutions was formed to look into the modalities of the envisaged consortium.

The Sub-Committee was entrusted with the following terms of reference: to identify a name for the envisaged consortium which will be inclusive of other academic institutions in the Southern African region and not only the historically disadvantaged black universities in South Africa; and to identify projects of wide interest to all participants in the envisaged consortium.

Thirdly, a document from each participating institution is to be made available showing areas of excellence and areas which need to be developed through linkages. **Fourthly**, the following were identified as the areas in which linkages can begin: research and training; governance, joint publications and exchange of information, staff-students exchange; joint conferences, workshops, etc.

Fifthly, the need to reduce the culture of dependency on external donors by stepping up efforts to mobilize internal resources for the various projects to be undertaken. Sixthly, the linkages to be established should include academic, administrative, technical and secretarial staff. Finally, existing visits and exchange of information among the various staff members, i.e. academic, administrative, technical and secretarial, should be encouraged and supported.

CONCLUSION

The paper discussed the experiences of the University of North-west, South Africa in its efforts to enhance academic excellence and promote an intercultural perspective of teacher-education curricula in the North-west Province of South Africa.

As a result of the colonial history and racist propaganda of the apartheid system, there exists intercultural ignorance and prejudices among the different racial and ethnic groups in South Africa.

The apartheid mass media and racist educational system limited the knowledge of the people within South Africa about the rest of the continent. The rest of the continent, especially the neighbouring Southern and Central African countries were merely portrayed as centres of terrorism and communist insurgence.

Under the new democratic educational system, the objective of the teacher education curricula is to produce teachers with a broader outlook of South Africa as part of the Southern African region, socially, culturally, politically and economically. In order to promote this objective and enhance academic excellence in teacher education, the colleges of education in the North-west Province have been affiliated to the Institute of Education of the University of North-west. The Institute has been given the responsibility of guiding academically all teacher education in the province in matters pertaining to curriculum development and implementation.

Moreover, through syllabus panels at the Institute of Education, the tutors of the affiliated colleges of education are actively involved in the designing of the syllabi for their respective teaching subjects. This provides them with an opportunity to contribute their views concerning the content and structure of the syllabi.

Furthermore, in order to promote the objective of moving the University of North-west out of isolation enhance academic excellence and build research capacity, the Vice-Chancellor of the university has instituted an advisory committee on external relations.

The mission of the committee is to forge linkages with other institutions within and outside South Africa. In cooperation with other historically black institutions, the University of the North-west intends to form a consortium of Southern African Universities. The aim is to share experiences on different issues of common interest including institutional governance.

References

Barnard, S.S. (1980) Comparative Education for Student Teachers, Johannesburg: Butterworth.

Benbo, (1978) Bophuthatswana at Independence.

Bophuthatswana National Education Act No: 2 of 1979.

Christies, P. (1984) Bantu Education: Apartheid Ideology and Labour Reproduction, in Kallaway, P. (Ed.) Black South Africans, Johannesburg: Press.

NCHE (1996) A Frameowk For Transformation. National Commission on Higher Education, Research Management Agency, South Africa.

Malharbe, E. (1977) Education in South Africa.

Mazrui, A. (1990): Cultural Forces in World Politics.

Niven, J. (1980) Affiliation of Teacher Colleges and the University of Bophuthatswana. A Case of Teacher Education Curriculum Innovation in Bophuthatwsana Institute of Education Teacher Education Division Monograph 10.

Taylor, P. (1987) An Evaluation of the Affiliation Between the University of Bophuthatswand and the Five Colleges of Education.

NATIONALISM AND GLOBALIZATION IN TEACHER EDUCATION

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Nationalism:

"Can be defined as a set of symbols providing the sense of being part of a single political community. Thus, individuals feel a sense of pride and belonging in being "British," "American," or "French" Probably, people have always felt some kind of idenity with social groups of one form or another. For example, their family, clan or religious community" (Giddens, 1994, p.311).

Despite the emergence of nationalism in the Western world, it was spread to different parts of the world as a response to colonialism which in many cases participated directly in the establishment of new nation states. Therefore, (like many western states) the elite of the independent nations saw education as a means to create national political systems that would command the loyalty of factions that earlier gave allegiance to a local elite (McGinn, 1990, p.110). For the same objectives, all governments around the world use education for the purpose of socialization (to transmit cultural values and norms). It goes further to forge a population into a unified society (social integration) and to channel young people into culturally approved status and roles that contribute to the ongoing life of society (social placement) (Macionis, 1989, p.405). Because of these nationalistic orientations, every state puts her trust in teacher education programs to prepare national teachers who should have certain capacities which will allow them to fulfill their duty to carry-out the government policies and regulations. Their mission is not only to teach the basic skills and behaviors, but also to transfer the national values and norms to the new generations who should be raised and educated to achieve the national dreams. Griffin (1992) argued that, many countries maintain their immediate supervision on teacher education through different government agencies which have direct influence on certification and employment. Thus, teacher education has to follow the state policies and regulations even in a democratic country like the United States of America.

Because pre-service teacher education content and expected outcomes are directed in large part by state department of education, colleges and universities are often forced to provide (or, as is recently the case, not provide) certain courses or field experiences. If choices not to abide by state mandate are made, graduates of programs are denied state certification and, ultimately, opportunities for employment. Similarly, states are more active now than previously in requiring that new teachers satisfy entry standards for knowledge and pedagogy. Moreover, experienced teachers must demonstrate participation in continuing education and/or provide evidence that they have mastered specified teaching behaviors for continuing certification (Griffin, 1992, p.1134).

No matter what type of political ideology or system is followed in the modern state, the main objective of education including teacher education is to prepare a citizen who has strong faith and loyalty to the national government. That is why each state explicitly declares very clearly in its policy the major goals of education which include. (1) producing good people (social/moral education), (2) developing well-informed people who understand the physical and universe (liberal or general education), (3) promoting individual's physical and mental health (health and safety education), (4) developing faithful supporters of the society (citizenship, civic, or political education), (5) producing efficient workers (vocational education), and (6) equipping individuals to realize their self-selected destinies (self-fulfillment education) (Thomas, 1990, p.26).

These goals are convincing evidence about the explicit intention of nationalists around the world to monopolize the educational systems for the purpose of maintaining the status quo and the social structure which are not necessary for the benefit of the country or the individuals. This is because of the many variations among the people in many countries in terms of race, gender, language, religion, ethmcity, culture, etc. According to Neo-Marxist thinkers, schools are organized to reinforce inequality and to teach students to follow the laws and the regulations of the elite who demand loyalty from citizens (Hurn, 1985, p.61). This is very true in the case of the dictator governments which impose their policies on the education of institutions through their centralized systems.

In contrast with the Marxist and Neo-Marxist ideas, every society whether on the local or the national level has to maintain order among the community members, and education has been the right tool to make them follow and accept those commands. Based on this fact, the nationalists usually focus (through the hidden curriculum) on the main symbols in which the society has bride and shares respect. Therefore, every state invests extensively to prepare the teacher who will play the role of "surrogate of middle-class morality" and "agent of social change". He is required to teach the national ideology, social values, and the attitudes of the ruling class.

Beyond this (teaching the basic skills), the elementary school teachers must teach facts and attitudes favorable to the nation or the church or any other institution supporting the school. Thus, they must teach in a way that is favorable to Communism in the Soviet Union, to a mixed capitalist-socialist economy in Britain or the United States, to the French of Brazilian systems in France or Brazil, and so forth. In a society in which schools are directed by church or religious groups, as in Spain, he must teach the relevant religious beliefs and attitudes (R.J.H., 1989, p.436).

In national and state systems of education, the legislature generally requires that certain subjects be taught so as to "improve" the citizenship or the morality or the health of the students.

Globalization:

"Globalization theories add to this thesis that modernization in the West has directly resulted in the spread of certain vital institutions of Western modernization to the rest of the globe, especially the modern capitalist economy, the nation-state and scientific rationality in the form of modern technology, and critically, that this global spread has resulted in a new social unit which is much more than simple expansion of Western Modernity...globalization is Western imperialism, whether economic, political, technological or broadly cultural" (Beyer, 1994, p.8).

The preceding quotation (Beyer, 1994) explicitly explains the purposes of globalization which became the most debatable issue of the 1990's. The globalists major concern has been focused on how to expand the global awareness to the people of various societies. To achieve this objective, globalists have recognized the importance of education as the most effective instrument to pass or to expand and sell their ideas to the people of various nations around the globe with the help of the common characteristics (organizational forms, functions, objectives, structure, legislation, plans, and models) that are shared by the educational institutions around the world. They target their efforts toward teacher education programs which will educate the future teachers who should prepare their students for citizenship in a global age, but this cannot occur without a fundamental change in the content, in the methods, and in the social context of education. The demand for such a change comes from the writings of so many Westen educators like Watson (1991) who said:

> *The responsibilities placed on teachers to broaden their own horizons as well as those of their students is considerable, but the task must begin at the level of teacher education. Only if changes occur at that level is there likely to be any improvement. Teachers and teacher educators must shed their myopic perceptions and become more internationally minded if the mistakes of the past are to be avoided (Watson, 1991, p.124).*

Some institutions of teacher education in the Western countries have responded to the globalists' demands by introducing new courses with global orientations. Their "overall goal is to develop global literate educators who can effectively prepare their students to be participating citizens for life in the Global Village" (Swiniarski & Breitborde, 1996, p.4).

Further than this, globalists intend to start their activities with popular issues (population expansion, environmental pollution, unquotable destruction of resources, famine, drug abuses, and disease) that are not necessarily a problem in certain societies. They put a lot of emphasis on social studies which should bridge the gap between the various cultures and societies and expand the Western culture as discussed by Chilcott (1991):

> *All this suggests that social studies teachers need to look at the world as a whole, a totality, a system, instead of a sum of self-contained societies and culture, and what we should look how this totality developed over time... When discussing the term "world culture," which has been developing in recent times, students should decide whether this shared by all populations of the world. They should consider the possible rise in social consciousness among the world's population for peace, freedom, and certain standard of living for all the world's population. They should review the effects of the arrival of the Coca-Cola culture in the rural areas of the world (Chilcott, 1991, p.44).*

To extend the global awareness to the individuals and institutions which should adopt and promote globalization, specialized international agencies. (UNESCO-World Bank) and scholarly journals (international and comparative journals in different fields) escalate their efforts to establish an intellectual choerence among educators and intellectuals around the world. International conferences and seminars are held annually to activate the dialogue and to analyze the challenges and to strengthen the ties among the group of interest in the area of globalization. Their major efforts are aimed to direct the educational institutions, mainly teacher education programs toward global teaching and learning.

The ever riding objective of the global learning mode is to investigate in the long-run to waht extent entire nations can learn about issues of both national and global concern. The development of a global learning strategy is faced with a double challenge to take both a horizontal appraoch, which means integrating knowledge across disciplines and uniting scientific and popular experience, and a vertical approach, which means cutting through situations at various levels, local, regional, national, and international (Husen, 1990, p.138).

The Social Role:

Within the national framework, the teacher, like any citizen of any country in the world, divides his loyalty among different categories to include his parents, family, reliious or ethnic groups, intellectual community, society, and the country of the nationality. His belonging varies from one form of association to another depending on his status in each one of the above categories. Therefore, his general role is to satify each group interest to support the national priorities (security, culture, national and private propeties, etc) under which the teacher and the subgroups of the society abide to. Sociologists argued that the teacher has different roles to play in the society, but the main one is to teach the national values that are shared by the whole population in spite of their personal and cultural differences in countries like the U.S.A.

> *Children are taught patriotism by saying the pledge of allegiance and by studying the history and geography of the United States and their state and community. They learn that the United States is a great country founded by great leaders who believed in freedom for all. Students learn about the democratic system of government, the fairness of representation, and the importance of the vote. They are taught to value the capitalist system, in which everyone has the right to accumulate as much propety as possible and pass it on to one's children (Eshleman et al., 1988, p.431).*

Among other roles, the teacher should be an ideal for his students in terms of manners, attitudes, appearance, behaviors, and loyalty. He is considered to be an agent of change and through him the new values and skills are passed to the new generations. Based on these responsibilities, he is accountable for the society and the formal authority in his country. There are many roles for the teachers that vary from one country to another and from one school stage to another, as presented in the following to show the different roles of the teacher in the institution and community levels.

Roles in the school or university
Mediator for learning
Disciplinarian or controller of students' behavior
Parents' substitute
Confidant to students
Judge of achievement
Organizer of curriculum
Bureaucrat
Scholar and research specialists
Member of teachers' organization

Roles in the community
Public servant
Surrogate of middle-class morality
Expert in some areas of knowledge or skills
Community leader
Agent of social change

In those areas in which teaching has not yet become a profession, the teacher may fill fewer of these roles. The primary school teacher in a simple agricultural society, for example, will fill only the first five of the school roles and the first and, possibly the second, of the community roles. Some of the roles conflict, that is, the performance of one, that is of disciplinarian, for example, tends to conflict with another such as that of confidant to students, or the role of independent and creative scholar will tend to conflict with the role of agent of social change (R.J.H., 1989, p.436).

The Global Role

The unity of the human race on earth is beyond the ethnocentric perspective which the people like to draw around themselves based on their language, belief, race, color, or nationality. In very simple language, the inhabitants of earth go back to the same origins and have the exact biological characteristics and functions. These are the most fundamental elements which control and define the role of every individual on our planet. They share with each other varieties of needs and concerns. Further than this, their similarities are the natural feature while their differences are the indication of deviance. Based on this rational, the teacher, as human, has a global mission towards his brothers and sisters of mankind on earth and toward the living creatures and the natural resources. He is also required to respond to many global issues that are facing world citizens including famme, population expansion, environmental pollution, drugs, diseases, human rights, etc. He has to work as a messenger of peace by telling his students the truth about the other societies and cultures. According to globalization theorists, the global educator should have the following quality.

> *The global teacher is a facilitator. His/Her role is not primarily to impart knowledge... but to facilitate students in their learning and in their learning how to learn.*
>
> *The global teacher has a profound belief in human potential. She recognizes that students do not come to class as empty vessels but with some knowledge, some experience and a range of opinions and perspectives to share with others.*
>
> *The global teacher sees learning as a process that is life-long. She views learning as a journey with no fixed or final destination... that is why the global teacher is also a global learner...*
>
> *The global teacher is rights-respectful and seeks to shift the focus and locus of power and decision-making in the classroom. She is agalitarian. Her goal is the autonomy and empowerment of the individual within an affirmed, democratic, and participatory environment. (Pike and Selby, 1988, pp.273-74).*

There are multiple roles for the teacher, but he should use his national role to achieve the global role based on tru information and away from bias and stereotypes as presented in some of the national knowledge to achieve certain political goals. This is what educators in the United States of America like to achieve through their teaching profession.

The underlying thesis, or organizing construct, of American Education in a Global Society is that as teachers we live and teach in two dimensions. First, we are citizens of nation-states, such as the United States, and we teach in school systems that cultivate in students a sense of national identification. This is also true for teachers in other countries around the world. Second, we simultaneously are citizens of particular nation-states and members of a global society that has possibilities for human growth, as well as problems for human survival that has transcend national boundaries (Grutek, 1993, p.1).

Comparative Analysis

Despite the conflict of interest between nationalists and globalists, both agree on the importance of teacher education to achieve their objectives. Each side of the conflict modifies the content of teacher education programs to include courses and subjects that are relevant to their agendas. Based on this fact, nationalists usually focus their policies on defined geopolitical areas to which their people pay respect and loyalty. They put a lot of emphasis on their similarities while working very hard to limit their differences using assimilation policy.

"Children are to be initiated not merely into society but, in the twentieth-century world system, into the national society. The state organizes society; therefore, the individual must be an effective agent of the state if the social structure is to function well. That is, the individual must be a citizen who learns to identify (however, begrudgingly and with many protestations) with the national symbols and programs so as to help ensure the success of state action" (Ramirez & Boli-Bennett, 1985, p.490).

To distinguish themselves from others and to establish harmony and coherence among their people, the national governments use education to plant the desirable culture and values in the minds of their citizens. Thus, teachers are prepared according to national standards in order to qualify them to implement the national policies.

"Training of professional teachers involved in their recognition of larger principles of the republic and their inner submission to them. In addition, it was the role of the institutes to train teachers to extract total obedience from their students" (Tom, 1991, p.68).

As presented in the following table, teacher education programs put general requirements that are focused on national courses with various subjects about history, geography, national education, language, culture, development, religion, etc. While this national knowledge is aimed to build the character who has loyalty to his country, it might promote hatred and negligence for the people of other nationalities. Maclean (1990) found national knowledge to be among the strong variance for integraton in the European countries.

"National knowledge remains powerful in most countries. It can be separated into two kinds. First, there is the historic knowledge upon which national identities and national political cohesion have been based. It has been treated in curriculum areas such as history, literature and civics. This knowledge has been attacked in the past as anti-European where it encourages intolerance and xenophobia. But new problems emerge when migrants are faced with the national historic knowledge of host communities that do not meet their cultural aspirations and which maybe offensive to their own national cultural as well as sub-cultural identities (Maclean, 1990, p.0).

In contrast with the nationalist's micro concerns, globalists have a macro orientation about the global issues which emerged as a result of advancement in technology, communication, and transportation, on the one hand, and the strong political and economical ties among the world countries on the other. Their inspiration comes from the capitalist expansion which is sweeping the world looking for a wider market and more consumers. They consider education and educators as agents to convince the world population to adapt their agendas and concerns. Therefore, teacher education is the suitable place to start promoting their ideas among teachers who will transfer the global awareness to the new generation "Students must be prepared to participate productively in a global community, and faculty members must contribute to the understanding of problems of international import" (Pacheco & Femandez, 1992, p.33).

The global knowledge as shown in the preceding table contains varieties of courses which include many issues that are not a matter of concern for some countries at this point of time. Among many popular courses in this area are global education, international education, multicultural education, peace education, comparative education, etc. whic discuss certain problems like peace, population expansion, environment, drugs, human rights, feminism, democracy, and diseases.

Nationalism	Globalization
Courses:	**Courses:**
National education	Global education
National history	International education
National geography	Multicultural education
National Language(s)	Peace education
National culture	International business education
National religion(s)	Development and education
National institutions	Comparative education
National politics	Economics of education
Social institutions	Education and development
National resources	International organization and education
National development	International studies
National literature	Literacy and adult education
Subject matters:	**Subject matters:**
Nationality and identity	Peace
Social values	Environment pollution
National resources	Drugs
Local environment	Diseases
Social change	Human rights
Security	Feminism
Patriotism	Democracy
Health	Population expansion

The purpose of the global knowledge is to prepare teachers who have enough understanding of the global issue and have the ability to teach their students how to act as world citizens. This will not happen without aggressive change in the content of the curriculum and in the method of teaching.

Global education consists of efforts to bring about changes in the content, in the methods, and in the social context of education in order to better prepare students for citizenship in a global age (Andersen, 1979, p.15).

CONCLUSION

There is a strong conflict between the national and the global orientations in many countries around the world, but the challenge comes from the major western powers from which both nationalism and globalization have emerged as a result of the aggressive developments of modernization in such societies.

The tensions that exist between one's commitment and loyalty to the nation-state, to one's own country, and the imperative for a larger and broader sense of global realities are evident in schools, curriculum, and instruction. Schools in the United States, like school systems throughout the world, very heavily reflect the commitment to create citizens who are loyal and participating members of various nation-states. In our case, the public schools, through the formal curriculum and education milieu, seek to cultivate in students a knowledge of the American past through the study of history, a facility in using the English language as the national medum of communication; an awareness of the structures of American government, and a desire to participate as citizens in the affairs of the republic. In addition to teaching students the basic skills (reading, writing, and computation) and the basic academic curriculum (science, mathematics, language, the social sciences, and humanities), public schools seek to develop a sense of citizenship that is particular to the United States (Gutek, 1993, p.19).

Both nationalists and globalists have political interests to guide their educational policies, and every group is using education to achieve is objectives. Despite the positives and the negatives of each side, the victims of such exercises are the poor societies and the cost of change is very expensive. This is because through education in general and teacher education in particular, the wild capitalist countries are pushing the poor nations to adapt globalization and by acting in this direction, globalization is attempting to marginalize the state's control over their economy and culture. It is aimed to impose western culture.

> *Globalization is the direct consequence of the expansion of European culture across the planet via settlement, colonization and culture mimesis. It is also bound up intrinsically with the pattern of capitalist development as it has ramified through political and cultural areas (Waters, 1995, p.3).*

Globalization is not worse than the narrow concept of nationalism which is limited to ethnicity, race or ideology. Therefore, teacher education programs must combine nationalism and globalization concerns according to the true understanding for the primary and fundamental role of human beings on earth.

References

Andersen, L. (1979). Schooling and citizenship in a global age: An exploration of the meaning and significance of global education. Indiana University.

Basirico, Lawrence A., Cashion, Barbara G. and Eshleman, J. Ross. (1988). *Sociology: An Introduction,* 3rd edition. Harper Collins, U.S.A.

Beyer, P. (1994). *Religion and Globalization.* SAGE Publications Ltd., London.

Chilcott, J.H. (1991). It is time to change the classroom maps. The interpretation of the tribal and modern world. *The Social Studies.* March/April, 1991, pp.44-48.

Echleman, J.R., Cashion, B.G. and Basirico, L. (1988). *Sociology and Introduction, Third Edition.* Harper Collins Publishers, U.S.A.

Giddens, Anthony (1994). *Sociology*, 2nd edition, fully revised and updated. Oxford, U.K. Polity Press.

Goetz, Philip W. (1989). *The New Encyclopedia Britannica Macropaedia's Knowledge in Depth.* Chicago.

Griffin, Gary A. (1992). Teacher education. In Marvin C. Alkin. *Encycloedia of Educational Research*, Vol.4, Macmillan Company.

Gutek, Gerald L. (1993). *American Education in a Global Society. Internationalizing Teacher Education.* Longman, New York.

Hum, Chirstopher J. The limits and possibilities of schooling. *An introduction to the Sociology of Education,* 2nd edition. Allyn and Bacon, Inc., Boston, U.S.A.

Husen, Toesten. (1990). *Education and Global Concern.* Pergamon Press, Oxford.

Macionis, John (1989). *Sociology,* 2nd edition. Prentice-Hall, New Jersey, U.S.A.

Maclean, Martin (1990). *Britain and a Single Market Europe Prospects from a Common School Curriculum.* Kogan Page, London, U.K.

McGinn, Noel F. (1990). Forms of Governenance. In Thomas, R. Murray (1990). *International Comparative Education: Practices, Issues & Prospects.* Pergamon Press, Oxford.

Pacheco, M. and Femandez, C. Knowing No Boundaries: The University as World Citizen *Educational Record.* Spring 1992, Vol. 73 No.2, p.23.

Pike, G. and Selby, D. (1988). *Global Teacher, Global Learner.* Hodder and Stoughton, Sevenoaks.

Ramirez, Francisco and Boli-Bennett, John (1985). Global patterns of educational institutionalization. In Ballantine, Jeanne H. *Schools and Society: A Reader in Education and Sociology.* Mayfield Publishing Company, California, U.S.A.

R.J.H. (1989). Teaching. In Philip W. Goetz (1989). *The New Encyclopedia Britannica,* Chicago, Vol. 28.

Saha, Lawrence J. and Fagerlind, Ingemar. (1989). *Education and National Development. A Comparative Perspective.* Pergamon Press, Oxford.

Swiniarski, Louise Boyle and Breitborde, Mary Lou. (1996). Educating teacher for world citizenship. Paper presented to the 9th World Congress of Comparative and International Education.

Tom, P.V.A. (1991). *A Political Sociology of Educational Reform,* New York.

Waters, Malcolm. (1995). *Globalization* Routledge, London.

Waston, Keith (1991). Teachers and teaching in an interdependent world. *Compare,* Vol.21, No.2.

DECLINING MALE ENROLMENT IN SCHOOL: THE BOY CHILD PROBLEM

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INTRODUCTION

It is generally accepted that education is a profitable private and public investment, both from the economic and social point of view. It provides basic literacy and equips the youth "with necessary moral, physical, intellectual and even vocational skills that will make them (the youth) versatile and useful members of the community (Yusuf, 1995)". Education increases the personal earnings of the individual as well as the supply of skilled and highly educated manpower needed for economic development.

Education is the enabling agent for modernization. It equips one with the potential for harnessing and exploiting the environment which is ever changing, by developing one's knowledge's, attitudes and skills. In its simplest forms, informal education, it prepares the child for his immediate environment, but with the world becoming one mega-community, the scope has expanded. This new worlds community, with multi racial, linguistic and cultural groups interacting, there is a great need for formal, rather than informal education.

Access To Formal Education In Nigeria

Basic formal education in its simplest form equips learner with basic literacy, numeracy; problem solving and communicative skills needed very many in international co-operations. Basic primary education also has the added benefit of helping to modernize peasant societies as it leads through its programmes, to better health and nutrition, increased productive capacity and more enlightened citizenry. It reduces squalor, disease and misery. Beyond the basic level, its role in development becomes more obvious as it is the agency for the development of human resources very much needed for production in all sectors of the economy.

The development of formal education in Nigeria has a history of gender disparity in favor of the males. It was seen as the progressive of the boys to go to school. Many parents kept their daughters away from "Whitman's education" because they did not see the need for that exposure when in the final analysis "the place of the woman is in the kitchen, more so, in another man's kitchen. The southern part of the country softened on this stand earlier than the north, but it was not until post independence period (1960 and beyond) that the education of girls, especially in the southern part of the country became generally accepted. Table *1*, shows the steady growth of female participation in secondary education in Nigeria. This trend was encouraged by the interventions of world bodies like the U.N.O.,UNESCO, UNICEF, who mounted campaigns for the education of women. The awareness created has helped many women throughout the federation to attain great heights in the social, economic and political life of the nation.

Table (1)
Enrolment in Secondary Education (General) in Nigeria by Sex

Year	Male		Female		
	Number	%	Number	%	Male/Female
1960	106.826	79	28.538	21	135.364
1961	127.223	76	41.015	24	168.238
1962	143.768	74	521.731	26	195.499
1963	151.807	72	600.072	28	211.879
1970	205.953	66	104.095	34	310.054
1971	317.931	73	115.382	27	433.313
1972	264.949	66	134.778	34	399.722
1973	297.030	66	155.342	34	452.372
1973/74	327.769	66	170.975	34	498.744

Source: Statistics of Educational in Nigeria

The New Twist

Twenty years after independence, by the 1979/80 academic session, female participation in secondary education has risen from twenty-one percent in 1960 to forty-four percent in the South Eastern part of the country. Five years later, by 1985/86 session, it reached a sixty one percent level outstripping the proportion of women in the society. One may be tempted to assume that it was the backlog of uneducated girls that brought about the change. This however, does not explain it all because statistics even show a low growth index for the boys (Table *II* & Fig *I*).

Table (2)
Growth of Secondary Education in Anambra and Enugu States by Sex

Year	Male		Female		Male/Female		Female Participants In %
	No.	Growth Index	No.	Growth Index	No.	Growth Index	
1975/76	40.394	100.00	23.707	100.00	64.091	100.00	36.99
1976/77	50.519	125.10	29.829	125.00	80.346	125.36	37.13
1977/78	59.003	146.10	29.310	123.71	88.313	137.77	29.81
1978/79	64.880	160.66	47.906	202.08	112.786	175.98	42.48
1979/80	71.390	176.78	57.007	241.46	128.397	228.40	44.40
1980/81	75.558	187.10	77.820	328.25	152.378	239.31	50.74
1981/82	74.553	184.56	87.268	368.10	161.801	252.46	53.94
1982/83	74.007	183.26	97.354	410.66	171.360	267.37	56.81
1983/84	77.072	192.83	111.327	469.60	189.200	295.21	58.84
1985/86	68.797	170.36	108.260	456.66	177.057	267.26	61.15

Source for raw data: Nigeria: Statistics of Education in Anambra State Ministry of Education, Statistics Unit, Enugu, 1987

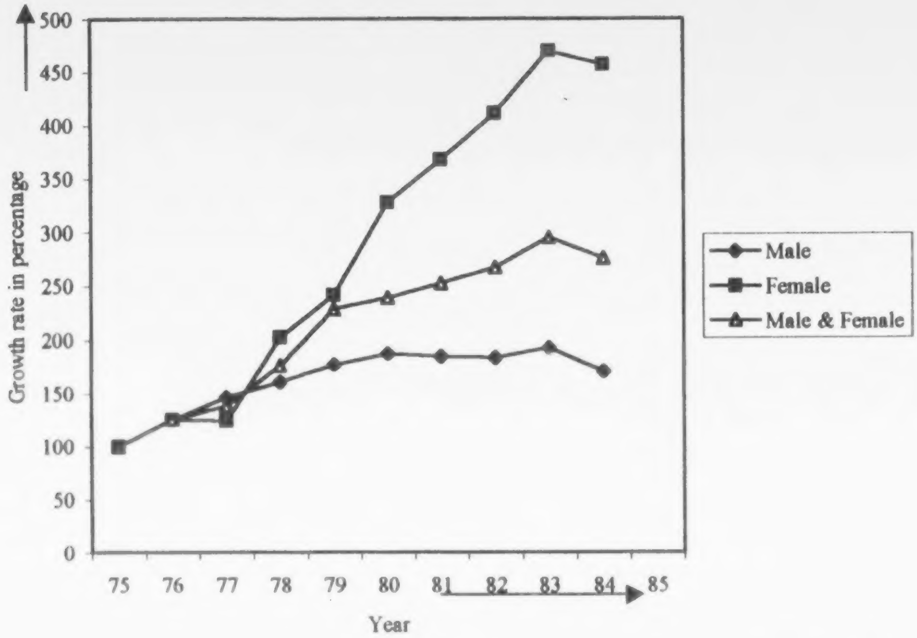

Fig (1)
Growth rate of secondary enrolment in Anambra and Enugu States by Sex

Questions are now being asked, "what is happening to the boys?" Okafor, (1991) report a series decline in the enrolment of males into college courses. One can observe a rapid increase in the number of girls in Nigerian universities as in some; hostel facilities originally designated for males were converted to female hostels in some Nigerian universities. Many single-sex secondary schools meant for boys had to go co-educational to remain viable. Even primary schools started showing signs of "take-over" by the females.

Table III brings out the trend in primary school enrolment from the 1980/81 session to 1983-84. When each cohort of pupils is followed up longitudinally ,one can see that the critical point where trouble states is primary 5 or at age eleven. In the first four years of schooling, there are more boys than girls in class but on getting to primary 5, the table turns and one sees more girls than boys in the class. This is the age when they go out into apprenticeship. The business barons/ trade masters prefer picking them up at that age, when it is believed they can more easily be trained. This trend is confirmed by Table IV which shows that at between 1984/85 and 1989, there were more boys enrolled into primary one, but by the time they reach primary six, there are more girls than boys. The ratio of female participation therefore rises above what it was in primary one. Wasagu (1995:5) decried that:

> *... majority of the boys who are of primary and secondary school age have abandoned the schools and have taken to street hawking ... These primary school age kids from the eastern part of the country are also commonly in every motor spare parts shop all over the country ... They abandoned the school in search of money.*

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Table (3)
Primary School Enrolment in Anambra and Enugu States by Year and Sex

		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	All	% Female Paprticipation
1980/81	M	122.605	91.211	83.000	80.326	66.160	61.498	495.600	49.6
	F	105.456	86.123	81.398	82.735	68.922	63.040	487.674	
	MF	218.061	177.334	164.398	163.061	135.082	124.538	983.274	
1981/82	M	113.251	92.337	87.517	82.735	62.854	62.417	501.205	50.2
	F	108.341	88.946	84.454	84.416	68.485	69.620	504.262	
	MF	221.592	181.283	171.971	167.245	131.339	132.037	1005.467	
1982/83	M	104.618	73.362	75.449	71.132	56.444	49.861	431.141	49.5
	F	99.655	68.723	72.132	70.286	57.755	53.740	422.311	
	MF	204.273	142.085	147.631	141.418	114.199	103.601	853.452	
1983/84	M	111.450	77.342	72.160	70.494	53.359	43.779	428.584	48.9
	F	100.308	71.407	66.559	57.616	55.415	58.581	409.886	
	MF	211.758	148.749	138.719	128.110	108.774	102.360	828.470	

Source *Nigeria, Statistics of Education in Nigeria 1980 – 84, Federal Ministry of Education, 1985 Edition pp 23-25.*

The Concern

Nigeria cannot afford to leave the boys out of schooling. Education is closely linked with development, industry and wealth . Without it there will be no doctors to heal the sick ,engineers to build the bridges, architects to design modern structures, lawyers to protect and defend people when their rights are threatened etc. Everybody, both males and females need to be literate and acquire problem-solving and communicative skills in order to fit into the modern society and contribute to its development.

If the trend (declining male enrolment) is not stopped, time will come when heads of families (the men) will be so incompetent in the society that cracks and rifts will develop in family relationships and that basic structure of the society will get generally unstable. When this happens the entire social system will collapse. Already, some of the rich but largely uneducated men manage to "buy" wives who are in the professions – doctors, lawyers, pharmacists, engineers etc. With money in hand, they scout for educated women especially those in the professions to talk into marriage, probably to make up for their – educational deficiency. To some, it is also a status symbol.

In a society like among the Igbos, where traditionally marriage is "till death do us part", the unbalanced match has resulted in a lot of stress for the family. A married woman is generally in the case of a rift, asked to go back to her husbands' home to look after her children. To avoid the stigma of living outside the marital home she stays in under a great stress which negatively affects even the children she is sent back to protect. Some semi-illiterate men have had to "by" honorary doctorate degrees from America, Europe, and the Far East in order to compensate for their deficiencies. This of course is a reflection of an inferiority complex and so is not a good solution.

It is also feared that time will come when the women will take over the control of our national policies, economy and social life. The men it is certain will not like to find out that by sitting in the office and using their superior brain power, the women control their highly valued money and compel them through tax laws to surrender money for common use.

Nigerian men are needed to contribute their own quota to national development in order to accelerate the growth trend. They cannot do this by being contend with distribution of goods produced in other countries. Nigeria needs to produce rather be content to consume goods from other countries of the world.

Research Intervention

In an attempt to identify the cause of this phenomenon, several studies, Ndu (1991), Okafor (1991), Jaja (1996), Yusuf (1995), Okeke (1995), Agu (1995), Udensi (1991), Nannie & Okenyi (1990) came up worth the information that:

1. Lack of employment opportunities after schooling reduces the motivation for formal education.
2. The preponderance of female teachers in school is a slap on the male ego of secondary school boys.
3. The Youths do not see the link between education and their occupational choice.
4. Inappropriate teaching methods scare children away from schoolwork and he boys, who have an excuse to drop out, move first.
5. Low economic status of parents compels children to stay out of school to earn a living.
6. Education seems to have lost its potency for being a means for social leverage, as educated persons can no longer afford items seen as status symbols.
7. Reduced chances of passing the school leaving certificate examinations.
8. Distance from school especially in the riverine areas reduced participation.

Through organized discussions through seminars, radio and television phone-in programs, it was found out that children drop out of school with the full support and encouragement of their parents who find it as an economic survival strategy. For them, the final and most important need is to make money. With the dearth of employment opportunities for school leavers, with university lecturers earning salaries that cannot take care of family needs, with teachers frequently on strike, what hope is there for education to be effective in imparting knowledge's and skills necessary for survival in the society. They feel that education is long and tortuous without any guarantee of success.

As education is not free and cannot really be so now, because of ineffective techniques of revenue drive (taxation etc) parents still need to pay for school materials – clothing, books, transportation etc. To survive the hard times, they keep the girls in school (for security reasons) and put pressure on the boys to get into economic activity. The boys go into child labour, street shopping, apprenticeship, truck pushing, farming and the like to help family survive the difficult times.

The culture of the Igbos who occupy the contiguous States of Abia, Anambra, Ebonyi, Enugu, Imo and parts of Delta, extol individual achievement, especially materially. The current value system cherishes the acquisition of material wealth rather than education. "Afterall, a university degree no longer guarantees employment for graduates (Yusuf, 1995:)".

Government Action

If children are not in school, teachers will lose their jobs. If theaters do not teach well and also plan a relevant curriculum, children drop out of school especially the boys who are under pressure to earn a living. If boys remain out of school, the country will experience a decline in the number of male intellectuals and technocrats and soon, economic retrogression. The ensuring inferiority complex will reduce the stability of the home and subsequently, that of the social system.

Uncomfortable at the probable consequences of observed trend, the affected governments in the southeastern part of the country raised an alarm. UNICEF received the alarm signal and expressed its willingness to support strategies and programmes to redress the situation especially at the primary school level.

Proposed Strategies

1. Mass sensitization workshops and rallies to alert people of the dangers of "experimenting with illiteracy and ignorance". The mass media debate and documentaries.

2. Improving the relevance of schoolwork by strengthening the vocational arm of the curriculum. This will mean a renewed emphasis on the training of teachers of technical and vocational courses.

3. Indirect payment of fees. Nigeria had introduced free education, but because of poor funding the system broke down. Tuition was kept free but parents supplied other materials. Communities raised money through P.T.A. levies to develop school structures and facilities. It was proposed that education be funded through some education taxes and funds and remove the burden from parents.

4. The use of legislation to compel children to stay through the first nine years of schooling and banning of child labour including trading. This will cover the period of primary and junior secondary education. Enforcement is however seen as problematic.

5. Introduction of Guidance counseling in primary schools and strengthening the efforts already made at the secondary schools.

6. The restructure of the education system to integrate apprenticeship system with formal system. This will come in the form of a work/school scheme. It is suggested that this can be done through the introduction of afternoon/ evening schools in major cities where these boys go into apprenticeship. If established, the drop outs can pick up the strands and take some examinations that will enable them move back into the mainstream.

7. The use of Distant Learning Systems (DLS). This is already in place for teacher education in Nigeria. Radio lessons can be re-introduced to reach out to these boys wherever they are.

8. Job placement programmes, It is proposed that a close link be set up between schools and employers of labour, such that counselors assist desirous boys to link up to the employers of labour and improve their chances of employment. Companies can be programmed to periodically visit schools to advise students on job opportunities and their educational requirements so that they work towards it.

The boy-child is current and is attracting serious government attention and action. Nigeria may experience some far-reaching reforms in the education system.

The role of the mass media is becoming more obvious. The intervention of UNICEF in the sensitization effort clearly showed that the main thrust is the use of the media. Programmes have been designed using radio and Television phone-in sessions to educate the public. As part of the package which is currently going on as we discuss the issue in Amman, there are programmed Advocacy visits to opinion leaders and a mass rally at Omitsha, the main commercial center in the Eastern part of the country. A lot of educational talks, dram, debates, jingles and montage have been developed to reach out to people who would otherwise not respond to rallies or camp sessions because of their apathy towards organized group meetings. The Radio/TV lessons sponsored by government may come in to effectively teach people at work while practical programme will be taught in the evening and/or Adult Education centers.

A community-based project known as Catchment Area-based Planning, Management and Monitoring Mechanism (CAP-MM) has already come in as an educational reform in an attempt to attract and retain school age children in primary schools. This project which is already catching on integrates the effort of government, community representatives and non-governmental agencies in planning and managing the project. They co-operatively form the local CAP-MM body which in their own locality target all school age children to ensure continuity so they can benefit from the education that has achievable goals in knowledge, skills attitudes and behavior.

The CAP-MM utilizes both formal and non-formal education structures to perform. They requite para teachers and give them some training in their assigned tasks. The school programme is made flexible to adapt to local needs. They supervise the school continuously to ensure goal achievement at minimal cost. The body demands accountability from the teachers and headmasters' equipment government efforts to provide better school equipment and learning materials in each catachment area.

The UNICEF has also been very helpful in developing this reform through capacity building workshops, Advocacy and mobilization plans. It has done this in collaboration with the National Primary Education Commission (NPEC).

Table (4)
Enrolment by Sex and Ratio of Female Participation

	1984/85	1985/86	1987	1988	1989
M/F	349.996	382.023	230.646	252.229	251.241
F	117.591	178.214	108.018	116.531	119.707
%F	47.0	46.7	46.8	46.2	46.6
MF	108.080	167.820	103.539	103.659	96.611
F	56.645	84.852	51.105	50.958	47.692
%F	52.4	50.6	49.4	49.2	49.4

Nigeria, Federal Ministry of Education, Statistics of Education in Nigeria, 1985-1989

CONCLUSION

The boy-child problem is considered a very serious one that if not attacked, stand the chance of breaking the fabrics of national growth and development.

It is an on-going phenomenon, which has been identified as caused by economic difficulties, irrelevant school curriculum, lack of job opportunities for school leaves, and the desire to get rich quickly and achieve societal status symbols. It stands the chance of throwing off balance, the efforts at striking a just balance in access to education in the country.

Proposed strategies for redress include mass mobilization and sensitization campaigns, community – based interventions, teacher production in skill areas, review of school curriculum with emphasis on trades and technology, integration of apprenticeship programme with regular school programms, an enabling law to enforce compulsory education and better funding of education.

The nation is addressing the problem through collaborative efforts with UNICEF, by planning and introducing reforms the delivery of educational services. It is an on-going project and the final solution is not yet determined.

References

Agu, P.U (1995) Strategies for increasing male enrolment in secondary schools of Nsukka Education Zone. Unpublished M.Ed. Thesis, University of Nigeria Nsukka.

Jaja, N.A. (1988) "Child Abuse and neglect: Its effect on the school child" Paper presented at the biennial conference of the ANPPCAN in Jos, Nigeria.

Jaja, N.A. (1996) "The dynamics of child abuse. Enrolment Perspectives". Paper presented at a national seminar on strategies for improving enrolment and retention in primary schools organized by the National Primary Education Commission in Sokoto, 1996.

Nannie, M.D & Okenyi, S.O. (1990) An investigation into the cause of decline in male enrolment into education institutions in Anambra State, Nigeria Research in Education.

Ndu, Alice N. (1991) "Sex based imbalance in secondary school enrolment in Nigeria", in Okoye R.O. & Rosah, HON (eds) Nigerian Education at Crossroads, Onitsha Hybrid Publishers.

Nigeria, (1963) Population Census of Nigeria, Vol. I Federal office of Statistics, Lagos.

_______ (1964) Annual digest of Education in Nigeria 1960-1963 Federal Ministry of Education, Lagos.

_______ (1976) Statistics of Education in Nigeria 1970-1975. Federal Ministry of Information, Lagos.

_______ Anambra State government, (1987) Statistics of Education in Anambra State, Ministry of Education, Statistics Unit Enugu.

Okafor, C.O (1991) Decline in male enrolment in Anambra State Colleges of Education: A set back to sports development, in Okoye R.O. & Bosah H.O.N. (eds) Nigerian Education at crossroads Onitsha, Hybrisd.

Okeke, E.A.C. (1995) "A pilot study of boy-child education in Eastern States of Nigeria" A seminar paper, University of Nigeria, Nsukka.

Udensi, U.S (1991) "Enrolment problem in Abia State Secondary Schools". Unpublished undergraduate Thesis, University of Nigeria, Nsukka.

Husuf, Bilisu (1995) "Promoting boy-child education in Eastern States: a media Perspective" Paper presented at a workshop on Gender disparities in Education, enrolment and retention of pupils in primary schools, Owerri.

(Part V)

Final World Assembly Report and Recommendations Submitted by ICET To UNESCO

A COMPARISON OF THE RECOMMENDATIONS FROM TWO CONFERENCES

Teacher Education and School Reform
The 1996 ICET World Assembly
Amman, Hashemite Kingdom of Jordan
December 16-21

and

Strengthening the Role of Teachers in a Changing World
UNESCO's International Bureau of Education
1996 International Conference on Education
Geneva, Switzerland
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The Key recommendations from the UNESCO International Bureau of Education (IBE) 1996 International Conference on Education were presented at the World Assembly by IBE Director, Mr. Juan Carlos Tedesco. ICET keenly appreciates Mr. Tedesco's pivotal address.

ICET wishes to thank each of the many writers who contributed to this document, with special accolades to Head Writer and Editor, Dr. Darrell Bloom, ICET Director and Chairperson of Curriculum and Instruction, Graduate School of Education, National-Louis University, U.S.A.

During the World Assembly Week, a committee of 38 Jordanian scholars were assembled by Dr. Kamel Dawani, Associate Dean, Faculty of Graduate Studies, University of Jordan, to serve as rapporteurs. They were tasked with synthesizing the content of 107 academic papers presented by educators representing 37 different countries. Each of these papers focused on one of four subtopics and each subtopic was assigned a Head Rapporteur to further distill the material and to develop recommendations. This document includes the reports of the four Head Rapporteurs.

The four primary writers of this report, whose challenge was to analyze and capture the relationship between the recommendations of both conferences, concentrated largely on the content of the keynote plenary speeches while referencing the work of the rapporteurs. These writers are members of ICET's Board of Directors as well as eminent scholars in their own countries, and ICET appreciates the excellent quality and importance of their contributions.

Rapporteurs

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The Forty-third World Assembly of the International Council on Education for Teaching (ICET) was held in December, 1996, in Amman, Jordan. The theme of the conference was, *"Teacher Education and School Reform "*. This conference followed the October, 1996, *"International Conference on Education"* held by UNESCO. Each of the conferences involved a diverse group of policy makers and practitioners in discussions of common interest. The purpose of this report is to provide an analysis of the topics presented at the ICET World Assembly and also find relationships between the deliberations of each of the groups. The first section is an analysis of the four main topics of the assembly as presented by the plenary session speakers and selected papers from the concurrent sessions. The second section provides a summary of the reports and many specific recommendations written by rapporteurs for each concurrent session.

The ICET World Assembly theme of, *"Teacher Education and School Reform "* was supported by plenary sessions and paper presentations that focused on four topics:

1. Enhancing Values in School Reform
2. Fostering Partnerships in School Reform
3. Preparing Teachers for School Reform
4. Capitalizing on International Collaboration for School Reform

The UNESCO International Conference on Education's conference put forth nine recommendations for teacher education. They include the following:

1. recruitment of teachers: attracting the most competement young people to teaching;
2. pre-service training : a better linkage between pre-service training and the demands of an innovative professional activity;
3. in-service training: both a right and a duty for all educational personnel;
4. the involvement of teachers and other agents in the process of transforming education: autonomy and responsibility;
5. teachers and their partners in the educational process: education as a responsiblity for all;
6. new information and communication technologies: serving to improve the quality of education for all;
7. professionalization as a strategy for improving the status and working conditions of teachers;
8. solidarity with teachers working in difficult situations, and
9. regional and international co-operation: and instrument to promote teacher mobility and competence.

Each of these recommendations is value laden and warrants careful attention to nation contexts. All of the above recommendations are addressed in the summaries and recommendations of the ICET 43rd World Assembly.

The first of the four ICET conference themes, "Enhancing Values in School Reform" elicited a series of papers and addresses that are certainly related to the UNESCO/ICE recommendations. The following items represent an ICET summary of key ideas directly related to the UNESCO/ICE recommendations:

Topic I. Enhancing Values in School Reform

The plenary session speech was given by Dr. Elaine Jarchow, Dean, College of Education, Texas Tech University, on the topic, *"Enhancing Values in School Reform."* The paper addressed numerous recommendations that were part of the UNESCO conference.

1. The characteristics of democratic schools include:

   - Participation in issues of governance and policy making.
   - Participation in communities of learning.
   - Commitment to diversity.
   - Curriculum of exploration. (Apple, 1995)

2. The concerns of democratic schools are these:

   - The open flow of ideas, regardless of their popularity, that enables people to be as fully informed as possible.
   - Faith in the individual and collective capacity of people to create possibilities for resolving problems.
   - The use of critical reflection and analysis to evaluate ideas, problems. and policies.
   - Concern for the welfare of others and "the common good."
   - Concern for the dignity and rights of individuals and minorities.
   - An understanding that democracy is not so much an "ideal" to be pursued as an "idealized" set of values that we must live and that must guide our lives as people.
   - The organization of social institutions to promote and extend the democratic way of life. (Apple, 1995)

3. A series of values that promote democratic schools are these:

   - Openness to Participation
   - Openness to Diversity
   - Openness to Conflict
   - Openness to Reflection
   - Openness to Mistakes (Patterson, 1993)

4. The values that will characterize tomorrow's schools are these:

   - Our organization values employees actively participating in any discussion or decision affecting them.
   - Our organization values diversity in perspectives leading to a deeper understanding of organizational reality and an enriched knowledge base for decision making.
   - Our organization values employees resolving conflict in a healthy way that leads to stronger solutions for complex issues.
   - Our organization values employees reflecting on their own and other's thinking in order to achieve better organizational decisions.

- Our organization values employees acknowledging mistakes and learning from them. (Patterson, 1993)

5. A series of questions that a school might ask of itself are these: To what extent does the school:

- value commitment to the development of the individual within the district?
- value treating all individuals as significant stakeholders in the organization?
- value a "we" spirit and feeling of ownership in the organization?
- value empowering employees throughout the district to assist in achieving the mission of the school district?
- value equal access by all employees to support information and resources?
- value all employees as equally important members of the organization?
- believe that employees act in the best interest of students and the organization?
- value employees as having the expertise to make wise decisions?
- value investing in the development of employees?
- value placing decision making as close to the point of implementation as possible?
- value the opportunity for input in district wide decisions?
- value decisions being make by those who are directly affected by them?
- value honesty in words and actions?
- value consistent, responsible pursuit of that for which we stand?
- value the unwavering commitment to ethical conduct?
- value differences in individual philosophy and practices?
- value differences in perspective?
- value schools and the children within them celebrating their distinct character?
- value students as inherently curious learners?
- value doing whatever it takes to achieve student success?
- value students being meaningfully engaged in work that has personal value to them? (Patterson, 1993)

6. The following ICET sessions on "Enhancing Values in School Reform" were also related to the UNESCO/ICE recommendations: (These can be referenced in the 996 ICET World Assembly Program and Abstracts.)

- Towards Quality Improvement in the Teaching and Learning of Mathematics in Nigerian Secondary Schools.
- Holistic Intervention in the Bedouin Settlement Tel-Sheva Intended to Improve Educational Achievement.
- Homework Etc.: A Character Development Education Partnership Program.
- Effectiveness of a Critical Thinking Course on the Improvement of prospective Teachers Thinking Skills.
- Valuing Theories of Action through Case Research Methods and the Experiential Learning Process.
- Focus on the Teacher: The Transfer of Knowledge from Teacher Educational into the Classroom.
- Educating Racial Minority Groups for Full Democratic Participation in the Social Systems of the Dominant Society.

- Multicultural Education: An Innovative approach to Teacher Education
- Different Drummers, Different Beats: Cultural Context vs. Musical Content in the Education of an Artistic Population.
- Enhancing Instructional Quality through Educational Reform: Value
- Added after Four Years
- Promoting Democratic Values and Practices in Nigerian Secondary Schools: Models of Delivery.
- Promoting Democratic Values and Practices at School.
- Social Studies Program in Teacher Education to Enhance Democratic Values and Practices
- Conflict Management: An Essential Tool in Building a Healthy School Climate.
- School Rules: Some Tensions Between Student Teachers' Needs and School Policy and Practice.
- Multiple Intelligences - Importance for Teacher Education
- Teachers as Listeners

References:

Apple, M. and Beane, J., Democratic Schools, ASCD Alexandria, Virginia, 1995.

Patterson, Jerry, Leadership for Tomorrow's Schools, ASCD, Alexandria, Virginia, 1993.

Topic II. Fostering Partnerships in School Reform

This section will focus on an analysis of two Topic II. keynote speeches: *"Fostering Partnerships in School Reform,"* by Mr. B. J. McGettrick from Saint Andrew's College, Glasgow, Scotland, UK and *"Positive Tensions: Keys to Educational Renewal in a School-University Partnership,"* by Mr. Robert S. Patterson and Mr. Russell T. Osguthorpe from Brigham Young University, Provo, Utah, USA. They will be discussed in the context of the Declaration and Nine Recommendations of UNESCO's Forty fifth session of the International Conference on Education.

McGettrick believes that the essence of all partnerships will be in the application of the broad principles of i) complementarity of purposes, ii) effective communication among partners, and iii) trust among partners. Moreover, he argues that it is essential to have a clear vision of the purpose of education before we can adequately discuss the ways in which we foster partnerships in the service of education. He wants education to be as free of legal requirements as possible, because these requirements do not enhance educational development. He feels that education must act as a beacon for society rather than as a mirror of it. Those who are engaged in education should be clear about the purposes of educational reforms, and should reflect these in the partnerships.

Fostering Partnerships between Schools and Universities

The professional education of teachers - both initial teacher education and inservice education and formation. Teacher education institutions have to establish partnerships with primary and secondary schools to facilitate both effective initial education and continuing professional development of teachers. Adequate initial training is not enough, because technology, ideas and communication all change so rapidly in the modern world. McGettrick notes that the nature of these partnerships can vary considerably.

Continuity in Curriculum Patterns for Learners

In this domain the relationships among schools and teacher education programmes and the university need consideration in terms of progression and coherence of curriculum Competencies that are promoted and core skills need careful consideration and identification.

Manpower Planning and the Role of Government

McGettrick argues that there is a close relationship between the aspiration of school reform by government and the resource allocations to schools and higher education. Furthermore, in government policy there is a subtle balance between resource allocation to different sectors of education which can enable or impede school reform. Planning reforms is crucial, and initiatives being developed through government, private initiatives and corporate companies are all of significance.

Economic Advantages in Higher Education from Society's Point of View

In his contribution McGettrick argues that educational reforms must be based on sound educational, social and moral principles. School reforms require teacher reforms teachers are the essential power for change in education. The quality of education in schools is largely determined by the quality of the teachers in them. In the development and implementation of school reform the abilities of teachers and their professionalism as educators are very important. Successful staff development programmes will focus on the school as a community. Therefore, school reforms must also foster partnerships internally within the school, and school reform should be built into school development planning. In line with modern conceptions (see for instance Hargreaves, Fullan) McGettrick makes a distinction between personal and professional development and corporate staff development. The school development plan plays a crucial role in staff development planning.

In the evolution of school reforms curriculum development, staff development and institutional development are of great importance. McGettrick mentions three main conditions for successful school reforms: i) clear rationale for the reform' ii) time for staff to discuss and reflect, and iii) the availability of materials to support the reform. Furthermore he calls for stable and flexible organizations, characterized by internal cohesion and effective external communication.

In the final section of his contribution McGettrick discusses briefly some internal and external forms of partnerships that facilitate school reform and create a confident learning community. More specific he calls for a strategic alliance between the school and centres for educational development. These centres should have i) technical competence and effectiveness, ii) an understanding of the ways in which schools transform themselves, iii) a clear understanding of the value systems which motivate and permeate the schools, and iv) be able to empower the school in its development as a community in transformation

Discussion

McGettrick's presentation addresses some issues that are raised in the Declaration and nine recommendations which were the outcomes of UNESCO's Forty-fifth session of the International Conference on Education. He underlines the principle that educational reforms must affect schools and classrooms, and that teachers, therefore, are central to the success of reform implementation. In his contribution he combines an interesting (but specific) understanding of the aims of education and the role of schools in our society, pedagogy, and conceptions of school reform and professional development. The qualities of teacher education programmes were not discussed in depth. The comments that follow will focus on i) McGettrick's (implicit) conception of the role and competencies of the teacher, ii) the position of and challenges for teacher education and higher education with regard to school reform, and iii) the methodology of school reform. A more comprehensive approach will be taken rather than dealing with each issue.

Practicing teachers are key to the transformation of schools. Thus in order for teachers to lead or co-lead the reform efforts, they need to be offered and take responsibility for expanded professional development experiences. In this sense professional development is an integral part of current efforts to revitalize education. In the process of school reform both knowledge and commitment of teachers are crucial factors. As Lieberman and Miller (1990) state, "for school restructuring to occur, a combination of factors must be present at the same time and over time - including leadership, a shared mission, school goals, necessary resources, the promotion of collegueship, and the provision of professional growth opportunities for teachers". In line with this statement we have to educate teachers and other professionals for leadership and change (O'Hair and Odell, 1995; Haynes, Notten and Van Veen, 1995). Action research and professional development schools are among the emerging concepts that support functional and productive collaborations among various types of professionals. University faculty, support systems for schools and staff developers have to rethink their roles and relationships. McGettrick's contribution does not touch these issues.

In the current climate of systemic reform, the professional development of teachers and school leaders are high on the agenda as well as the simultaneous renewal of schools and the education of educators (Dilworth and Imig, 1995; Goodlad, 1993). In spite of the success, there are persistent barriers common to a lot of programmes that tend to inhibit their success. Potential conflicts between teacher education institutions and schools are role definition, communication, time and organization problems, emergence of new skills requirements, reward structures, and a shared concept of learning and "good" teaching. Research shows that we can turn these stumbling blocks into stepping stones and build successful and lasting collaborative relationships for the sake of good practice in teaching and learning.

Professional development schools where school and university personnel work together to i) facilitate higher levels of learning by all children in the school, ii) to promote a better school environment for preparing teachers and other educational professionals, and iii) to create a more supportive site for renewal of and inquiry by experienced teachers, administrators, school service personnel and university faculty. Through the collaborative efforts of pupils in the school, community members, pre-service educators, practitioners in the school and university faculty, the professional development school can become an exemplary learning environment in at least four respects: it uses effective curricular, instructional, and administrative practices to help ensure that all students reach their full potential as students and as persons; it provides for renewal, professional growth, and continuing education of all participants; it serves as a site for pre-service educators to work in a stimulating learning environment with outstanding practitioners; it allows educators in training to experience the full range of responsibilities of practitioners in their professional fields; and it supports inquiry, research and exchange of professional knowledge.

The second recommendation of the 45th session of the International Conference on Education in Geneva, 1996 (better linkage between pre-service training and the demands of an innovative professional activity), the fourth (the involvement of teachers and other agents in the process of transforming education: autonomy and responsibility), as well as the fifth recommendation (teachers and their partners in the educational process education as a responsibility for all) are in the very heart of these complex learning communities.

Another aspect that is listed - but has been given too little attention - in the recommendations of the International Conference on Education, Geneva 1996, is "Solidarity with teachers working in difficult situations"(No.8). This recommendation touches the need for expanding partnerships serving children, youth and families through professional collaboration and service integration (Day, Van Veen & Walraven, 1997). Unfortunately, McGettrick's contribution does not mention this trend at all, whereas school-linked comprehensive services for children and families - and the various types of partnerships in urban school reform - are high on the political and professional agenda in a lot of countries. The same is true for the concept of network learning and the concept of educating or learning cities. We feel that these concepts and issues need further clarification and set the stage for future research-based experimentation and collaborative school reform.

References:

Darling-Hammond, G. (1994). Professional development schools: Schools for developing a profession. Teachers College Press: New York

Day, C., Van Veen, A.F.D. & Walraven, G. teds.) (1997). Children and Youth at Risk and Urban Education. Research, Policy and Practice. Garant: Leuven/Apeldoorn

Dilworth, M.E. & Imig, D. G. (1 995). Professional teacher development. The ERIC Review, 3 (3), 5-11

Goodlad, J.I. (1993). School-university partnerships and partner schools. Education Policy' 7 (1), 24-39

Haynes, K. S., Notten, A.L.T. & Van Veen, A.F.D. (1995). Professional Education for Social Change. Garant: Leuven/Apeldoorn

Lieberman, A. & Miller, L. (1990). Restructuring schools: What matters and what works. Phi Delta Kappan, 71 (10), 759-764

O'Hair, M.J. & Odell S.J. (eds.) (1995). Educating Teachers for Leadership and Change. Corwin Press: Thousand Oaks, California

The Patterson and Osguthorpe presentation, *"Positive Tensions: Keys to Educational Renewal in a School-University Partnership,"* provides an overview of recent developments in America that have lead to the recent interest in school-university collaboration. Their review of the literature on the background for collaborative efforts points out that it is not an easy task. Mutual understanding and trust are needed in the endeavor. The Brigham Young University (BYU)-Public School Partnership is used an example for many of their comments. Dr. John I. Goodlad has worked closely with BYU in its partnership effort and has observed:

> *For schools to get better, they must have better teachers, among other things. To prepare better teachers (and counselors, special educators, and administrators) universities must have access to school settings exhibiting the very best practices. To assure the best practices, schools must have ongoing access to alternative ideas and knowledge. For universities to have access to exemplary settings and for these settings to become and remain exemplary, the schools and the preparing institutions must develop symbiotic relationships through joining together as equal partners. In the kind of partnership envisioned, universities have a stake in and responsibility for school improvement just as the schools have an interest in and responsibility for the education of those who will staff the schools (1987 pp. 19-20).*

The authors point out that although universities and schools share common purposes they often act independently and critically of one another.

The importance of developing a separate entity from the partner schools and the university is made clear. All stakeholders must make a commitment to the goals of the collaborating group. The development and maintenance of trust must constantly be nurtured and built. Goodlad (1994) asserts that the following conditions must exist in partnerships in order to ensure their success:

1. Distinctive differences among the courting parties.
2. The complementarity of these differences that is, the degree to which each side contributes to the other's lack.
3. The degree to which the courting parties first envision and then comprehend through experience the extent to which this complementarity depends on commitment and effort fully shared.
4. Powerful contextual contingencies.

The next step is to design new systems to improve practice and enhance student learning. This is a creative process in which theory and practice are brought together. The presenters use the term "partner school praxis" to describe this process. They highlight the need to share and celebrate accomplishments. Without such activity, the partnership will eventually disintegrate.

It is also recognized that many positive tensions will exist. This type of collaborative effort will require new approaches to working together. Tensions among participants must be resolved by the power of each participant to initiate change, rather than relying exclusively upon designated leaders who, in the old paradigm, mandated change. The effort can yield more lasting and meaningful improvements in educational practice. Building on "shared experience" can result in powerful change.

Eight positive tensions in school-university partnerships are described. Each runs the risk of becoming too subjective or too objective in its approach. The authors suggest a more balanced approach to each tension. They are as follows:

Tension	Balanced
Membership	*Informed Membership:* Participation is based upon the interests,. abilities, and needs of each partner.
Roles	*Role Flexibility:* Partners shift roles as needed while retaining institutional identity.
Commitment	*Symbiosis:* Participants work to meet their partner's and their own needs simultaneously.
Planning	*Nurtured Development:* Partners sustain both planned and unplanned initiatives of mutual benefit.
Approach to Change	*Inquiring Change Agentry:* Participants support each other in Change thoughtful examination of each change initiative.
Amount of Change	*Disciplined Openness:* New change initiatives are considered in light of current work.
Evaluation	*Collaborative Evaluation:* Partners jointly determine the value of their work through both symbolic evidence and measurable results
Cost-Benefits	**Parity:** Participants agree that contributions are yielding appropriate benefits.

Patterson and Osguthorpe's eight positive tensions described above offer insight into important variables that have an impact on building effective partnerships. A necessary balance must be found between each of the positive tensions that inevitably emerge as change initiatives are designed and implemented.

Once again the second, the fourth, and the fifth recommendations of the 45th session of the UNESCO/International Conference on Education were addressed in this keynote presentation. The presenters analysis and recommendations provide specific and practical recommendations for working collaboratively between schools and universities. The innovation sought in UNESCO/ICE's second recommendation will become more effective as teachers and university professors collaborate in real world settings to accomplish change. Teachers must be involved in educational change (recommendation four,) but we all need realistic models that might be adapted to each countries needs. Finally, teachers are partners in the educational process (recommendation five) and if they are disregarded, we limit the development of our future teachers.

References:

Goodlad, J.I. (1987). *Linking schools and universities: symbiotic partnerships.* (Occasional Paper No. 1). Seattle: University of Washington Center for Educational Renewal, Institute for the Study of Educational Policy .

Goodlad, J.I. (1994). *Educational renewal: Better teachers, better schools.* San Francisco: Jossey-Bass Publishers.

Patterson, R.S. & Osguthorpe, R.T., *Positive tensions: Keys to educational renewal in a school-university partnership* (Paper) December, 1996. Amman, Jordan: International Council on Education for Teaching.

Topic III. Preparing Teachers for School Reform

As the UNESCO/ICE paper focused on the theme for the forty-fifth session of the Intenational Conference on Education, namely *"The role of teachers in a changing world,"* the Subtheme 3 of the 43rd ICET World Assembly, namely *"Preparing teachers for reform," is* highly relevant. As a matter of fact, Sub-theme 3 attracted some 50 paper presenters, including the plenary paper presenter, Professor Sim Wong Kooi from the University Brunei Darussalam

The paper presenters were from 18 countries, namely Bahrain, Brazil, Brunei Darussalam, Honk Kong, India, Indonesia, Israel, Jordan, Mexico, Nigeria, Palestine, Philippines, Romania, Turkey, Uganda, United States of America, West Bank and Zimbabwe. Understandably, each of the paper presenters tended to focus on the situation in their own country. Even the plenary paper made *"particular reference to Brunei Darussalam."* in terms of current developments in Brunei Darussalam as well as innovative developments in other countries that have relevance to Brunei Darussalam in *"preparing teachers for school reform. "*

However, it is envisaged that some ideas and insights have important implications or applications in many other countries. For example, according to the plenary paper, three *"meta-strategies"* were employed to provide an integrative framework for other strategies that Sultan Hassanal Bolkiah Institute of Education decided to incorporate in its Strategic Planning, as follows.

1. *The Systemic meta-strategy* defined as *the strategy of viewing the entire system, as well as its sub-systems and supra-systems, in terms of structural, functional and interactive relationships and relevant inputs, throughputs and outputs.*

2. *The Synergistic meta-strategy* defined as *the strategy of generating wider-ranging, value added outcomes through proactive planning and the innovative integration of otherwise disparate actions.*

3. *The Symbiotic meta-strategy* defined as *the strategy of seeking collaborative involvement, and possible networking, of relevant stakeholders for mutual benefit.*

At recent National Colloquium *"Towards developing and strengthening partnerships in teacher education,"* the eight pairs of C's were identified as very important aspects in the Institute's current efforts in reviewing its various teacher education programs. These pairs of C's were then subsumed under the meta-strategies as follows.

1. *Change & Continuity, Context & Coherence and Comprehensiveness & Complementarity under the Systemic meta-strategy.*

2. *Creativity & Credibility and Confidence & Competence under the Synergistic meta-strategy.*

3. *Communications & Congruence, Commitment & Care and Co-operation & Competition under the Symbiotic meta-strategy.*

Judging from the audience's comments and questions, it is possible to infer that these ideas were perceived as being not only refreshingly new but also generic in their applicability to other countries. The *"systemic approach to educational strategies," in* particular, has in feet been highlighted in the UNESCO/ICE paper.

While many of the points in the UNESCO/ICE paper have been amply reinforced and exemplified in the ICET papers, some have been emphasized and elaborated upon more extensively than others. As in the UNESCO/ICE paper, practically all the ICET papers seem to make the tacit assumption that *"the teacher is the key actor in the process* of *educational transformation,"* while most of the ICET papers recognize *"the necessity of designing integrated policies for teachers (and teacher education).* " Hence, a recurring point in the ICET papers per se, or in the ensuing discussions, is that reforming preparing teachers is absolutely essential for school reform. One paper was entitled *"Curriculum before curriculum: A challenge to a global vision on teacher education."* Presumably, reforming teacher education curriculum is a prerequisite to reforming the school curriculum.

While some papers referred specifically to pre-service or in-service teacher education, including teacher induction, most of them referred to teacher preparation in general or as encompassing all stages of teacher preparation continuum. Most of the papers dealt with specific desirable changes in the knowledge, attitudes and skills of teachers needed to confront an increasingly global, multicultural and (information) technological world, while some stressed the need for them to be reflective professionals. Considerable discussion centered around the significance of being a professional. One suggestion was that a true professional in education is one who is self-regulating, self-reflectives, self-renewing and self-respecting. Likewise, a frequent issue was the characteristics of a good teacher. Using a song, *"To Teach,"* the plenary paper underscored the importance of teachers being able *"to learn, to love, to live, to lead."* Two qualities were associated with each of these dimensions and the eight qualities were juxtaposed to read as:

Task-oriented,
Enthusiastic,
Autonomous,
Caring,
Humorous,
Enterprising,
Reflective and Skillful

There were many new, and important, perspectives in the UNESCO/ICE paper that were not dealt with by any of the ICET Papers. In particular, the sections on " *The wearing down of the traditional approach concerning teachers"* and " *The massification of the teaching profession"* presented many valuable points which each participant would do well to incorporate in any attempt to re-think or reform the process of *"Preparing teachers for school reform. "*

Topic IV. Capitalizing on International Collaboration for School Reform

Stephen Heyneman, Chief, Human Resources and Social Policy Division of the World Bank, presented a paper at the plenary session entitled, *"Basic Education and Economic Development: The Change in Standards for Both"*. The presentation addressed issues raised in the Declaration and nine recommendations which were the outcomes of UNESCO's Forty-fifth session of the International Conference on Education. These recommendations were based upon two principles:

a. educational reforms must affect schools and classrooms. Therefore, teachers are central to the success of reform implementation;

b. integrated, rather than partial, policies for teacher education must be designed.

Key recommendations concern the selection, career long training and development (henceforth referred to as CPD - the continuing development of teachers), and status and working conditions of teachers, the levels and timing of their participation in educational reform efforts, and the interaction between these.

Heyneman uses an economists macro perspective in proposing how these issues may be addressed within the worldwide context of rising costs of the teaching force, difficulties of attracting and retaining high quality teachers, and the need for national and international quality assurance and control systems, and presents a critique of the "traditional" view that the quality of basic education is low and so needs higher investment. He suggests that expectations of economic performance and standards of basic education have changed such that there is an interdependence between all levels and specializations in education. These are not new ideas, but it is important at this time to be reminded of changes in the macro context of education.

Total recurrent expenditures per student in the industrialized world almost doubled between 1970 and 1980. Between 1960 and 1980 the spending gap between OECD and IDA countries increased from 14 to 1 to 50 to 1. Over a similar period, the growth of GDP per worker by region increased in East Asia and the Pacific, but decreased in Europe and Central Asia, the Middle East and North Africa and Sub-Saharan Africa, and increased by only a small percentage in other regions of the world. His conclusion that education is taking a larger proportion of government spending and that this creates new issues of value for money' is inescapable in all sectors of the world. Expectations of teachers and learners in terms of their contributions to the economy. i.e. the product of their teaching as viewed from macro and mesa economic perspectives, are also more complex in some countries than others.

Heyneman proposes what he calls new rationales for making educational investments based upon three economic and social imperatives:

a. Higher individual productivity using new concepts of economic competitiveness;
b. Stronger sector efficiency using new concepts of sector inter-dependence;
c. Stronger contribution to social cohesion and social stability using new understandings of education mechanisms.

These, he suggests, would result in higher education quality which he equates with: labor force versatility through a better balance between public and private support, lowering regulations governing teacher "turnover" and supportive youth policies (in order to attract high quality teachers). He proposes that countries in the OECD and

MENA regions now have many similar indicators of their work regarding financial resources, participation rates in education, human resource commitment, system outcomes and social and economic contexts. Despite other differences, he suggests that it should be possible to design systems for the professionalization of teachers - cohesive education systems which are comparable in quality to those in competitive economies - which will result in competitive labor forces and social stability.

Professionalization of Teachers

The instrument which he proposes is one in which teachers subject knowledge, knowledge of didactics, classroom performance, and contribution to the education profession or to the school are revisited and assessed at three intervals (after one, seven and eleven years) and that success is related to salary scale. In this way, in his view, teacher growth can be rewarded; and in his model, lack of teacher growth will be treated negatively. For example, he estimates that 100% of teachers will progress beyond year one (as Apprentices) to be Grade 1 teachers, but only 80% beyond year seven to become Grade 2 and only 20% beyond year eleven to become Grade 3 teachers.

The economic worthiness of such a model is, at first sight, attractive and plausible However, further development of the model needs to address five key issues:

1. What support will be provided to improve those who do not progress?

2. How can validity of assessment at each point be established through the application of common standards, even within individual countries? For example, will a teacher in a social deprived inner city or rural school be subject to the same standards as those in schools where motivation and parental support are high?

3. On what knowledge base concerning teacher development are the suggested "transition" years based?

4. What would be the cost of the management of such a system?

5. How does the model take account of UNESCO/ICE's declaration and principle concerning teacher participation, improved conditions for teaching:

> "Many analyses indicate that the structural adjustment policies that many developing countries have undergone led to a decline in national expenditure, which considerably decreased in the 1980-90 decade. In many countries, the main way of adjusting the educational budget is through teachers' salaries: consequently, the reduction of educational expenditures provoked a considerable deterioration in the working conditions of teachers. This deterioration produced, in its turn, a series of well-known phenomena: demoralization, abandon(ment) of the profession, absenteeism, the search for other occupations and, finally, a negative impact on the quality of education offered to the population .. " (Tedesco, 1996).

The Heyneman model as it stands is unlikely to result in a reversing of this. In his model, contrary to the findings of UNESCO/ICE and decades of systematic research on educational change effectiveness, teachers would not play a central part, and governments would continue to be placed in the position of distant assessors with little understanding of the needs to achieve efficiency and effectiveness gains through critical support and challenge. Teachers are at the heart of the daily formal educational experiences of children and young people. In cultures which are promoting lifelong learning Heyneman's model is strangely reductionist.

Yet he is right in identifying the need for integration, a more holistic view of schools, teaching, leaning and measurable achievement. The different segments' of initial choice to teach, selection, pre-service and in-service (CPD) and the interaction between these, what is provided by government and school and community cultures need to be brought together. Within this, any system needs to be able to differentiate between teachers' professional profiles in order to provide appropriate targeted training and development. Schools appraisal systems and annual school development plans go some way to a systemic addressing of the needs identified both by Heyneman and UNESCO/ICE. Heyneman's model might, for example, provide for a regular examination of agreed minimum competencies, allowing those teachers who perceived themselves to be "growing" to provide a more extensive portfolio for review:

> *'... recognizing the need to tackle all dimensions of the problem does not mean that it is possible, nor advisable, to try to solve everything at the same time. The systemic practice must be understood as responding to the necessity of defining a sequence of actions according to which the when' and how' of tackling the various dimensions of the problem would become clear'. (Tedesco, 1996).*

Stephen Heyneman's paper provides a provocative and useful contribution to the debate about teacher quality, pupil achievement, and the costs of building and maintaining an effective, efficient education system in the context of changing expectations, needs and priorities. It is a valuable broad brush view from a particular perspective. The professionalization model which he proposes now needs to be taken forward in the context of the need to preserve teachers' self confidence, motivation, and continuing commitment alongside proper governmental concerns of quality and cost.

Section II. Report from Rapporteurs

General Recommendations Concerning the Four Main Topics of ICET'S 43rd World Assembly

Topic I. Enhancing Values of School Reform

The field of values is of extreme importance since it has an important impact on the overall development of children. Because values are considered in the context of the affective domain they are generally disregarded in schools. It is because this domain is not taught directly like the cognitive domain, it is a by product of teaching strategies.

Therefore, school curriculum should be revised carefully with special stress on how values can be inculcated in classroom students. In this respect teacher education programs should be the foremost place to start with in introducing values and to think creatively of how they can be taught effectively. Though research papers indicated that diversity among cultures does exist, training in the area of values education should be rigorous and profound.

Moreover, teaching values is crucial for strengthening understanding among nations. Infusing new values in schools that promote global interaction and cooperation, will help in establishing the "global village".

Topic II. Fostering Partnerships in School Reform

Research suggests partnerships between ministries of education, universities, and other educational institutions should be established and or enhanced so that teacher education can be improved through the collaboration. Therefore, it is proposed that those institutions involved should form a higher council to plan a set of general guidelines to enhance partnerships.

Topic III. Preparing Teachers for School Reform

The contemporary research on teacher education and follow-up studies in several countries have underlined the importance of the practice teaching component of teacher education programs. Observations of classroom practice invariably reaches the conclusion that practice teaching has not been given the high priority it rightfully deserves.

The formidable challenges posed by rapidly changing societies to the teacher education community have not been fully addressed. The papers discussed in the Assembly, however, have highlighted some major issues related to teacher education reform and proposed some solutions to teacher education problems which have been summarized in the topic three report at the end of this paper.

Topic IV. Capitalizing on International Collaboration for School Reform

Research on collaboration for school reform suggests that an international effort should be initiated to promote better global understanding of the role of teachers in the process of reforming school systems.

International efforts should focus on improving the teacher's working conditions and minimizing the phenomenon of burnout which is wide spread among teachers.

In order to maximize the development of national school systems in different countries the systems should become open to global concerns, trends and issues.

Teacher education programs should provide student teachers with opportunities to interact with their counterparts in different cultures.

Specific Recommendations on Each World Assembly Topic

Topic One: Enhancing Values in School Reform

Submitted by: Anwar Al-Said

Background

As great attention was given to the issue of enhancing values in school reform, school inputs i.e. the teacher, teaching materials, curriculum and textbooks are important to enhance contemporary values in schools. Advanced or underdeveloped societies are bound to look at the issue of values and the need for effusing new values is crucial to promoting international as well as global interaction and cooperation, so as to achieve a high level of universality. Henceforth, exchange of ideas stands as a means to foster and design promising reform schemes especially at the school immediate levels. A point of importance must be stressed: enhancing values in school reform requires strong societal and institutional commitment. Society must believe in change, and that change must take place in schools. Therefore participants in the reform movement must represent all groups of the society, no matter of what size. This might be justified when one realizes that educational systems in many underdeveloped countries are of the legacy the colonial powers. Therefore it is most important to have it reexamined, reformed, and put in a global cooperative context.

Values Stressed

The following set of values have a central role in school reform: .

- Openness to Participation
- Openness to Diversity
- Openness to Conflict
- Openness to Reflection
- Openness to Mistakes

If school reform is to foster these values, the teaching process must continuously be revised and improved. Among the various school subject matters, the importance of social studies in inculcating values was given prominence.

It was stressed that the seeds of democratic values are found in every country because of their universality, however, the practices of these values may differ from one country to another due to social, political, and economic context.

Democratic Schools

School reform must aim at giving schools more autonomy and independence. This will bring a shift in the function and role of the school from following to leading, from reproduction of values and ideas to bringing about change and innovations and introduction of new values. Democratic schools are characterized by:

- Participation in issues and governance and policy making.
- Participation in communities of learning.

1197

- Commitment to diversity.
- Curriculum of exploration

RECOMMENDATIONS

While referred to in different ways, the following recommendations are deemed of importance in almost all the papers presented under the topic of *"Enhancing Values in School Reform "*

- Intensive research must be carried out to pin-point the strengths and weaknesses of existing schools in the value-related areas, including teacher's perceptions of contemporary values and democratic practices in the classroom.

- Due to cultural differences, school reforms concerning values must come from within rather than from outside.

- Schools should emphasize the importance of being open minded to values of different cultures and thereby bring about international understanding.

- Advocates of school reform must ensure political commitment to achieve school reform objectives.

- School reforms must emphasize all aspects of equity, such as equality of access, equality of survival; equality of outcome; and equality of output.

- Effective supervisory systems must go hand in hand with any school reform.

- Tracer studies should be conducted to make sure that students have acquired the contemporary values intended by the reform.

Topic Two: Fostering Partnerships in School Reform

Submitted by: Dr. Majed Abu-Jaber

Background

In the era of advanced technology and new world systems, partnerships are becoming more and more essential to educational renewal and the improvement of teacher education. To sustain such renewal universities and Ministries of Education should work together in a collaborative mode, where knowledge and experience are shared, exchanged enriched and complemented.

Research suggests that the essence of all partnerships is in the application of broad principles of having distinctive differences and purposes among the participating parties; effective communication; and trust among the partners. In addition, there must be a shared understanding of these principles and how they are translated into action in different settings. The partnerships between universities and Ministries of Education are fostered in a number of ways including the professional training of teachers (both pre and in - service education); the continuity in curriculum patterns for learners; the concern for "manpower planning" and the role of government; and the economic advantages from society's point of view. Thus, encouragement and resources to facilitate the development and operation of partnerships between universities and schools must be provided by the Ministries of Education and the universities. They should support and facilitate partnerships not require or mandate them.

RECOMMENDATIONS

The following are the main recommendations from the various studies, papers, and articles that were presented on topic two *"Fostering Partnerships in School Reform "* and the discussions that followed each presentation.

1) Partnerships between universities and schools should be studied in order to identify conditions fundamental to successful operation, and to avoid negative or undesirable conditions which could limit effectiveness or the value of partnerships.

2) Partnership organizations should establish an evaluation system in order to ensure that the primary goals of improving student learning and of preparing better teachers are not overlooked or neglected in the process of working to create an effective partnership organization.

3) A Center or a committee for the Improvement of Teacher Education and Schooling (CITES) should be formed between Ministries of Education and universities to act as strong, positive change on drawing the partners closer to one another.

4) Partnerships which are functioning effectively should be identified and used as models to benefit those who want to start or enhance a partnership.

5) To enhance partnerships, school reforms should be built into school development planning, taking into consideration the value systems which motivates and

permeate the schools. Universities and Ministries of Education should up-date their curricula to induce educational reform.

6) In order to foster partnerships between universities and Ministries of Education, emphasis should be given to curriculum progression' coherence, relevance, and balance.

7) Due to its importance and effectiveness in school improvement and students' achievement, school councils should be formed in each school to facilitate partnerships among universities and Ministries of Education.

8) Emphasis should be given to provide appropriate technology to technical and vocational schools as well as academic schools.

9) Advances in information and computer networking technologies should be used to improve services and communication among faculty and staff members between universities and Ministries of Education.

10) To cope with emerging technologies and to improve the instructional processes, workshops, seminars and media demonstrations on the appropriate use of different types of technologies should be organized and conducted co-operatively between universities and schools.

11) Investments and resources should be directed toward computers and other types of interactive technologies provided that their use will raise the standards of general education.

12) A closer partnership between universities and schools should be emphasized concerning the improvement of teaching practice, taking advantage of the potential contribution of peer support as resources in students teachers' learning experiences during practice teaching.

13) Universities and schools must be open to international co-operation and exchange of ideas that enrich learning experiences and facilitate designing strong reforms.

14) Management training of administrators and principals is essential as is continuous staff development in relevant skills.

15) Students and teachers must commitment to better mutual knowledge of needs and aspirations.

Topic 3: Preparing Teachers for School Reform

Submitted by: Kapur Ahlawat

Teacher education today confronts unprecedented challenges from the fundamental changes in education systems imposed by all-embracing educational reforms being implemented in many countries. Most of these reforms implicate revolutionary changes in educational systems especially in the role and modus operandi of the teacher. It is clear that success or failure of educational reform, even after all other conditions have been fulfilled, lies in the hands of teachers. What is not clear is how to prepare teachers to shoulder such an enormous responsibility.

Topic 3 *"Preparing Teachers for School Reform"* under the theme *"Teacher Education and School Reform "* of the 43rd World Assembly of ICET focused upon this issue. An overview of the papers and their ensuing discussions is presented below.

Conclusions

There is universal realization that teacher education and training systems that served well the needs of education in the cold-war era all over the world, have outlived their utility. They are no longer valid for current needs of rapidly changing free trade economies and they are certainly unfit to prepare teachers who would face the formidable challenge to produce worthy citizens of national states of the evolving global society.

Existing teacher education programs are generally governed by stale theories, outdated pedagogy and stifling practices. They are overloaded with academic courses and there is little room for practice teaching. There is hardly any effective supervision and guidance; mentorship; or role models for student teachers to emulate in schools. Teacher educators are so set in their teaching methods (variations of lecture), cherished beliefs, attitudes, and idiosyncrasies that they find it hard to change. Education faculty in most universities and colleges are almost averse to change. They are reluctant even to entertain new ideas. Teaching/learning techniques such as drama, role playing, hands-on experience are only taught by lecture. They simply preach, but abstain from practice, and are generally threatened by the invasion of modern technologies.

There is general consensus among teacher educators and teachers, that existing teacher education programs ought to be restructured, redesigned and reconstructed to meet the needs of teachers. Also, there is common understanding that teacher education program reforms alone cannot achieve their goals unless they are accompanied by school reforms; structural changes in education systems, modernization of examination and assessment systems in schools, as well as in teacher education institutions; and improvement in the social and economic status of the teaching profession.

While the broad goals of the teacher education reforms are shared universally, the specific reform objectives, strategies, components, and implementation approaches are going to vary according to the needs and contexts of education systems in different countries.

Reform Requirements

Requirements of successful teacher education reforms alluded in papers and discussions included the following:

- Political will and strong national commitment
- Participation, cooperation and collaboration among all the constituencies concerned and education
- Ownership of the reform process and its outcomes by all the stakeholders and beneficiaries, particularly by teacher preparation institutions and teachers
- A sound reform plan based upon empirical research findings and long deliberations of specialists
- Implementation feasibility
- Adaptability
- Sustainability

Reform Recommendations

The following recommendations have emerged from discussions and deliberations of various teacher-education reform models and research findings

- In order to succeed, teacher education reforms should be synoptic and revolutionary rather than incremental and evolutionary

- Teacher education programs should equip teachers with knowledge, skills, attitudes and values which they are expected to develop and inculcate in their students.

- Teacher education programs should be robust, dynamic, innovative and readily adaptable to changing needs of society, changing conceptualizations of the quality of education, changing role and responsibility of the teachers, changing expectations of society and those of the teaching profession itself.

- Teacher education and training programs should emphasize and strengthen the practice teaching component, and practical applications of pedagogy in order to produce world quality teachers capable of meeting the teaching demands of the 21st century.

- Teacher preparation reform should not only be a continuing process, but also be one that marches in symbiotic synchronization with school reform.

- Education programs should strive for establishing a strong and enforceable code of ethics for the teaching profession.

- Components of professional training and development of teachers should include

a. General education consisting of social sciences, natural sciences, and humanities.
b. Preparation in the subject matter of specialized education.
c. Pedagogy, practice and technology.

- Teacher education institutions must establish networks of effective cooperating schools and master teachers to serve as models of best practice.

- To cope with new emerging technologies, and to improve the instructional processes workshops, seminars and media demonstrations on the appropriate use of different types of technology should be organized and conducted by universities in collaboration with schools.

- A closer partnership between universities and schools should be created to improve teaching practice by taking advantage of the potential contribution of peer support as resource in student teachers' learning experiences during the supported teaching practice.

- School-based teacher support systems, as well as, regional Learning Resources and Teacher Development Centers should be established.

- Teacher education programs should provide student teachers opportunities to interact with their counterparts in different cultures and to benefit from the exposure to alternative, innovative, teacher education and professional development programs in different countries.

- Teacher education reforms must ensure institutional commitment to prepare quality teachers for quality schools.

- Teacher education institutions should establish appropriate selection procedures and select high quality candidates with a strong commitment to teaching profession.

- Teacher education programs should encourage teachers to be creative and innovative in developing and adopting novel teaching methods, and conducting action research in their classrooms.

- Teacher education reforms should adopt three meta-strategies:

a. Systemic meta-strategy which views the entire system comprising sub system and supra-systems in terms of structural, functional and interactive relationships and relevant inputs, throughputs and outputs.

b. Synergistic meta-strategy to generate wide-ranging, value added outcomes through proactive planning and the innovative integration of otherwise disparate activities.

c. Symbiotic meta-strategy to ensure collaborative involvement, and networking of relevant stakeholders for mutual benefit.

Topic Four: Capitalizing on International Collaboration for School Reform

Submitted by Dr. Hani Abdel-Rahman

School reform does not operate in a vacuum or begin from stage zero. Our information age provides an opportunity to consider other countries experiences to enrich the alternatives that might be utilized in school reform. The following key issues were discussed in this area:

- There is an educational spending gap among different countries, e.g. within developing countries there is a gap in expenditure in higher education and basic education. Higher education expenditure is significantly more than basic education.
- In addition to international collaboration, the cooperation among school, home, and community must be emphasized in the process of education our children.
- In developing countries it is suggested that schools have begun to play the key role in the education of children, while in the developed countries the home and community role continues to be influential.
- Professionalization of teachers should be accomplished through special assessment procedures based on subject matter knowledge; observed classroom performance; and contribution to the school and the profession.

Highlights from Papers Presented at the Assembly

- You can't have higher quality education if you are not creative enough in dealing with educational issues.
- Pre-school teacher training programs should include artistic activities which can be utilized to teach children a variety of skills and enhance children's development in the social, emotional, and physical areas.
- The phenomenon of burnout is widespread among teachers to an extent that calls for international attention and should be subjected to focused research.
- Educational efforts should focus on international efforts concerning adult education and adjustments need to be made to meet the needs of all youth
- There is a need to incorporate modern technological information systems such as the Internet to promote understanding among students throughout the world.

RECOMMENDATIONS

- Equal educational opportunity should be provided to everyone regardless of race, gender, religion, etc.

- In reforming school systems emphasis should be placed on means and ways to develop national curricula open to global concerns.

- Teaching should be supplemented with a high degree of cultural awareness.

- Educational systems should be encouraged to "think global and act local."

General Conclusion:

One may say that all efforts of school reform should capitalize and concentrate equally on local and global knowledge. In order to develop national school systems, countries should be open to global concerns, trends, and issues, while appreciating the local variables in their endeavors to make school reform meaningful and manageable.

It is clear that there are many commonalties between the recommendations of UNESCO's *"International Conference on Education"* and those that emerged from the 43rd ICET World Assembly. Each speaks to the other concerning many of the important issues that confront practicing teachers and teacher education. It is incumbent on teacher educators to respond to the challenges and knowledge base that have emerged from each of these conferences. It has been repeated frequently in this document that the unique contextual needs must be considered. Yet the opportunity to gain insights from a diverse group of educators can only assist educational reform around the world.

INDEX OF AUTHORS

Last Name	First	Page #
A		
Abdallah	Taisir	691
Abu Alia	Mohammad	3
Abu Ashaikh	Mustafa	189
Abu Jaber	Majed	13
Abuloum	Khaled	201
Abuloum	Khaled	221
Acosta	Crispiniano R.	681
Adams	Leah	235
Al Khateeb	Radah	331
Al-Aghbar	Samar	241
Al -Ghazawi	Mahmoud	221
Al-Haddad	Abdelkareem	257
Al-Khateeb	Ahmad	271
Al-Khawaldeh	Naser	257
Al-Khawaldeh	Naser	287
Al-Kukhun	Amin	257
Al-Masri	Munther	371
Al Sheik	Omar	257
Al-Tamimi	Sawsan	189
[illegible]	Tony	299
[illegible]	Tony	305
Alao	Kayode	305
[illegible]	[illegible]	271
[illegible]	[illegible]	315
[illegible]	Edna	701
Ashour	Mohammed	331
Ashour	Rateb	257
Aweiss	Salem	347
Ayoub	Suad	109
B		
Baquero	Rute Vivian	707
Barber	Charles	363
Billeh	Victor	371
Bloom	Darrell	379
Bowser	Mary S.	21
C		
Cheng Chun Chor	Litwin	385
Creascy	Rechard G.	21

BEST COPY AVAILABLE

D

Darwazeh	Afnan	395
Darwazeh	Afnan	413
Day	Christopher	31
Dey	Sajalendu	421
Diab	Turki Ahmad Ali	429
Doktor	Judy	45

E

El Sameed	Souhaila Abu	589

F

Fafunwa	Babs	51
Fields	Ewaugh Finney	65
Fiho	Edson A. de Souza	73
Freese	John	439
Fu	Yin Wah Priscilla	125

G

Garc,ia	Lorenzo	445
Gidron	Arie!a	85
Goncalves	Maria Augusta Salin	707
Gon;zalez	Bertha Estella Garcia	711
Gonzalez	Blanca Delia Garcia	711
Guelfi	Maria Lucia Fernandes	93

H

Hamzah	Ramlah	99
Huff	Karen T.	21
Hutto	Nora Nelson	105

I

Ibrahim	Hala	455

J

J aradat	Fawaz A. A.	109
Jarbawi	Fafeeda	145

K

Kainan	Anat	467
Kasa	Zakaria	137
Kaya	Hassan Omari	723
Keil	Ivete Manetzeder	479
Kerek	Ynonne	117
Khader	Fakhri R.	497
Kiggundu-Mukasa	Daniel	483

BEST COPY AVAILABLE

L		
Lam	John Tak-shing	509
Law	Sin Yee Angelina	125
Leung	Cheuk Fai	509
Li	Joe Wai-shing	509
Lourdusamy	Atputhasamy	523
Lyon	Philip	539
M		
Mabetoa	Phineas	723
Martinez	Jeanette Saleh	711
McKenna	Michael C.	549
Miller	John	549
Moore	Micheal	597
Mosa	Ali Abdulah	729
Mothibi	Albert Reitseng	567
N		
Ndu	Alice	739
O		
Obaid	Ahmad J.	583
Obiedat	Zougan	589
Omari	Hamzah	257
Osman	Mohamed Eltahir	13
Oudeh	Ghazi	157
P		
Pihie	Zaidatol Akmaliah Lope	137
Q		
Qur'an	Maha	145
R		
Roellke	Christopher	663
Ronzer	Shmaryahu	597
Russell-Gebbett	Jean P.	153
S		
Sabri	Mustafa	3
Saleh	Ganett Gattas	711
Sanchez	Yolanda Sandoval	613
Schmitz	Egidio F.	165
Schwenk	Helga	621
Shahin	Hoh'd	633
Shboul	Monther	241
Smith	Joye	641
Stohr -Hent	Patricia	663
Surya	Mohamad	657
Sze	Sin-heng Celine	125

BEST COPY AVAILABLE

T

Tank Yee Fan	Sylvia	173
Tisinger	Catherine A.	21
Trayne[illegible]Yurek	Elaine	663
Tung	Hok-Ping	125

W

Woodring	Richard E.	65

Y

Yellin	David	701
Yu	Flora Wai-ming	509

Z

Zakaria	Zuhair	435

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1210